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The American Artisan
THE HARDWARE RECORD

Volume 43—No. 14. CHICAGO, APRIL 5, 1902. $2.00 Per Year.

Columbus Bolt Works,
Columbus, O.

Bolts,
Nuts,
Washers,
Turn
Buckles,
Bridge and Roof Rods
and
Bolts
ALL KINDS OF CARRIAGE FORGINGS ON APPLICATION
CATALOGUE

"Sampson Brand" **PURE ASPHALT ROOFING**
Never Dries Out or Cracks. Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc.
Write us for Prices **J. L. PERKINS & CO.,** 241 Lake St. CHICAGO

Our Facilities
are unsurpassed by any firm in the United States for the manufacture of

Stove Bolts,
Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets,
Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

We have a large *clientele* among stove men who appreciate our high quality prompt deliveries and attractive prices. Let us hear from you.

Atlas Bolt & Screw Co.,
Cleveland, O.

Independent Registers

Are made in over one hundred sizes—square, round, convex, circular top, round with square faces—any finish. Prices always right; quality right; shipments prompt.

We can make it to your advantage to do business with us. Write us.

Independent Register Co.
158 Champlain St. CLEVELAND, O.

A UNIVERSAL REMEDY FOR
LEAKY ROOFS.

The valuable qualities of a good roofing cement are firm adhesiveness and elasticity. These qualities the

AMERICAN SEAL BUILDERS' AND ROOFERS'
ELASTIC OIL CEMENT

possesses. It will adhere firmly to Slate or Metal and will not crack or crumble. It is especially recommended for repairing leaks around chimneys, dormer windows, sky lights, scuttles, firewalls and any place that requires fixing on a roof, either Slate, Tin or Shingle.

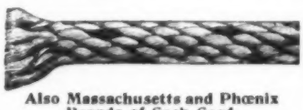
This Cement will answer to repair **a roof** when **Solder** can not be used

MANUFACTURED BY
Wm. Connors Paint Mfg. Co.
TROY, N. Y.
WESTERN AGENTS—J. L. PERKINS & CO.,
241 Lake Street, - - - CHICAGO, ILL.
STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are—doing—but—nobody—else—does.

BRADLEY SHELF BRACKETS.
Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

SAMSON SPOT CORD

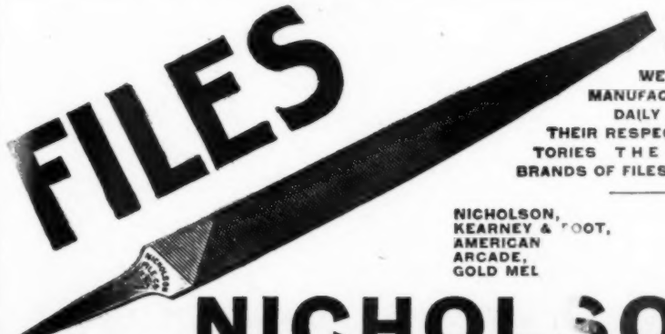


Also Massachusetts and Phœnix Brands of Sash Cord.
Samson Cordage Works, Boston, Mass.

Black Diamond Files and Rasps.
PERFECT—ALWAYS
Twelve Medals Awarded

At International Expositions.

G. & H. BARNETT CO.,
Black Diamond File Works, PHILADELPHIA, PA.



WE MANUFACTURE DAILY AT THEIR RESPECTIVE FACTORIES THE FOLLOWING BRANDS OF FILES AND RASPS:

NICHOLSON,
KEARNEY & FOOT,
AMERICAN
ARCADE,
GOLD MEL

GREAT WESTERN,
J. B. SMITH,
McCLELLAN,
EAGLE,
"X. F."

NICHOLSON FILE CO.
Providence, R. I., U. S. A.

BOILERS AND RADIATORS

A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

AMERICAN RADIATOR COMPANY
Lake and Dearborn Sts., CHICAGO.

"TABASCO" Water Heaters.

ALL STEEL, SELF-FEED, SHAKING GRATE.

FOR Small Residences, Greenhouses, Flats, Hotels, Baptisteries, Bath Houses, any place a supply of hot water is needed.

SEND FOR CATALOGUE.

Kewanee Boiler Compa'y
Kewanee, Ill.
CHICAGO STORE. 167-169 E. Lake St., CHICAGO.

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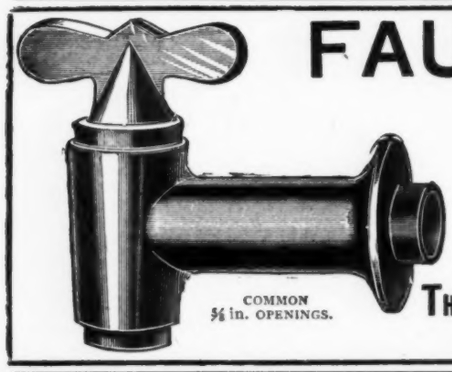
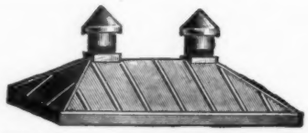


COMMON ⅝ in. OPENINGS.

Beer
Milk Can
Oil Can
Cream Separator,
of Various Sizes and Styles.
MF'D. BY
THE CLARK NOVELTY CO.
ROCHESTER, N. Y.



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METALLIC SKYLIGHTS

Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free.

J. H. JONES, Mfr.,
Lock Box 33 STREATOR, ILL.

"Eagle" Brand Copper Rivets and Burrs.

STANDARD FOR QUALITY. (Lake Superior Copper.)
——MANUFACTURED BY——
THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.

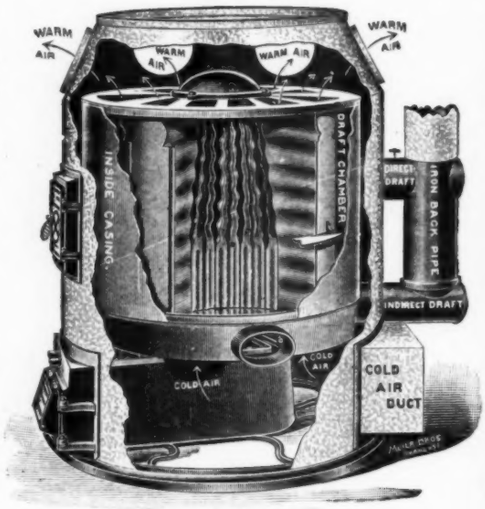
The Kelsey Warm Air Generator

THE PRINCIPLE

Of the Kelsey is to warm great volumes of air by bringing it into **actual contact** with an **extensive** and **properly heated** surface.

This is accomplished by sending the air in **separate channels through** the long hollow corrugated cast iron sections which form the fire chamber.

This is a far more effective method, and the air is more thoroughly and evenly heated, than by simply **passing over** or **next** to a hot surface.



Sectional View.

Cook and Van Evera Co.

30-40 Lake St., Chicago, Ill.

SELLING AGENTS FOR
ILL., WIS., MINN., IOWA,
N. & S. DAKOTA AND NEBRASKA.

A complete line of all sizes and repairs constantly on hand.
Prompt shipments insured.

Kelsey Heating Co., Makers, SYRACUSE, N. Y.

Moore's STOVES & RANGES

A RELIABLE THERMOMETER

In a house, is useful in regulating the winter's heat. It is many times more useful in determining and regulating the wide range of temperatures required in an oven. Our Thermometers are the best made. We guarantee them to be reliable and recommend their use. They will more than give satisfaction.

JOLIET STOVE WORKS,
JOLIET, ILL.

HOLBROOK, MERRILL & STETSON, San Francisco, Sacramento and Los Angeles.

WHITE'S Stoves and Ranges

ARE THE FUEL-SAVING LINE.

The Best Constructions ever offered for the money.

Have You Tried Us?

We Use the Best Soft Coal Grate ever made. It is patented, and used exclusively by us.

Why Can't We Do Business With You?

Our Special Low Net Price List on our entire line of Steel and Cast Ranges, Cooks and Heaters can be had for the asking. Don't overlook this.

Thomas White Stove Co.

QUINCY, ILL

Ten Years Ago,

and more, many of our present customers were selling **Born Steel Ranges** and they've been at it ever since. These old friends and the many new ones we are constantly gaining, stay with us year after year because they find the **Born** the best value, and the easiest and most profitable range to sell.

If you want to "tie up" to a good line, investigate ours.

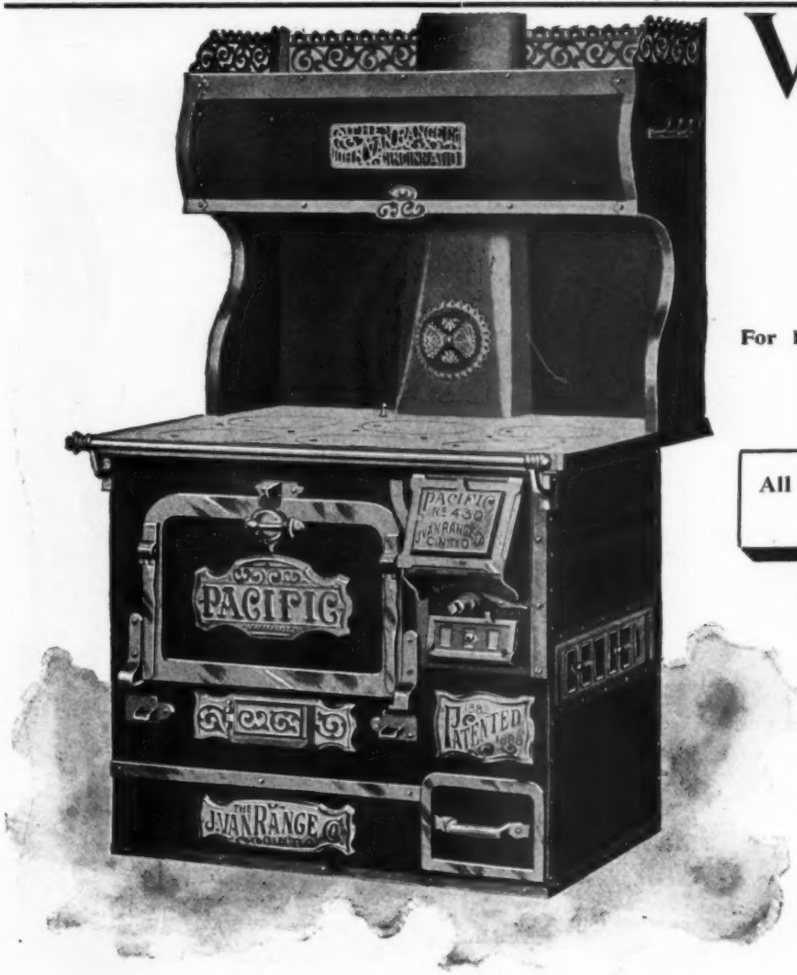
A postal will bring catalog and information.

JOBBING AGENCIES:

THE U. S. STOVE CO.,
235 Newberry Ave., Chicago, Ill.
THE M. P BORDEN STOVE CO.,
1617 Lawrence St., Denver, Col.
THE UTAH STOVE AND HARDWARE CO.,
Salt Lake City, Utah.
THE HARRY UNNA CO. OF S. F.
San Francisco, Cal.
M. SELLER & CO.,
Portland, Ore., and Seattle and Spokane, Wash.

The Born Steel Range Co.

CLEVELAND, OHIO.



Van's

Pat. Improved Wrought Steel Portable

Range

For HOTELS, RESTAURANTS, PUBLIC INSTITUTIONS, BOARDING HOUSES and PRIVATE FAMILIES.

All Kinds of Hotel Implements for Culinary Purposes.

Manufactured and For Sale by

The John Van Range Co.

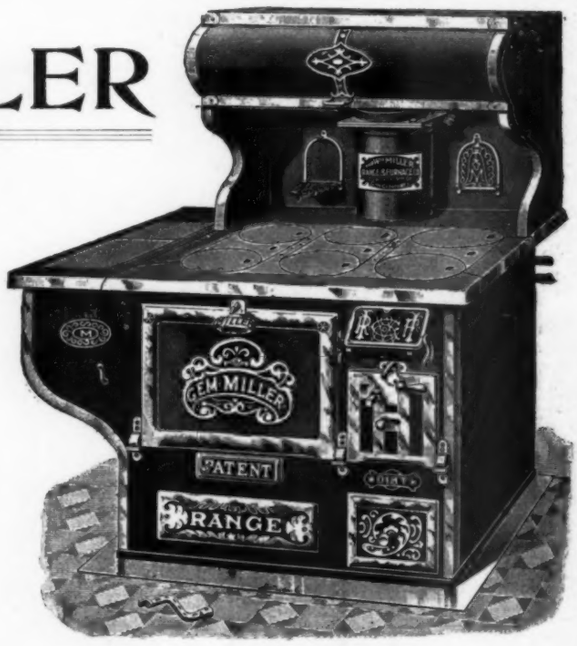
419 Elm and
410, 412, 414 & 416 Home Sts.
CINCINNATI, OHIO

The

GEM-MILLER

STEEL-PLATE

RANGE



Which we introduce as a High-Grade Medium-Priced Cooking Apparatus is made only by

THE WM. MILLER RANGE & FURNACE CO.

CINCINNATI, OHIO.

Write for Catalogue and Prices.

Boomer Furnace.

REGARDING

Boomer Furnaces

OR

Boomer Steel Ranges.

We want to state in strongest terms possible that if you want the

Heaviest,
Most Durable,
Most Economical

and easiest to take care of Furnace or Steel Range, buy a **Boomer.**

Boomer Steel Range.

Neither time nor money is spared to make them the Best. Buy Boomers and save your coal bills. We invite investigation.

THE HESS-SNYDER CO.,

Manufacturers, MASSILLON, O.

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STAR STOVES AND RANGES
ENTERPRISE STOVE CO. VINCENNES, IND.
GUARANTEED

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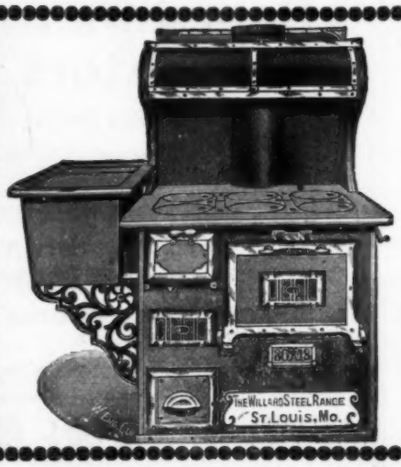
Gas Ranges
Steel Ranges
Cast Ranges
Steel Cooks
Cast Cooks
Cast and Steel Heaters
Hot Plates

WILL BE FURNISHED FOR THE ASKING BY

Enterprise Stove Co.
VINCENNES, IND.



The Willard Steel Range

combines LOW PRICE
and HIGH QUALITY.

Dealers who handle it control the steel range trade of their locality. Why not write us for Agency?

Wm. G. Willard, Mfr.
619-621 N. Fourth St., ST. LOUIS.

BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.
MILWAUKEE, WIS.

Monogram Stoves and Ranges
WRITE AND SECURE THE AGENCY AT ONCE.

THIS IS A SMALL CUT. But the dealers who sold the **Monogram Steel Range** last season pronounced it the largest and best range they had ever had on their floor. **There are none Better.**

Our reputation will not permit of our making any inferior goods.

Send for our Catalogue.

The Quincy Stove Mfg. Co.
QUINCY, ILL.

C. J. WORMNEST, Agent for Michigan,
Grand Rapids, Mich.

Ohio and U. S.
Wrought Steel Ranges

We are pioneers in steel range business; old in experience yet adopt modern up-to-date methods. Write for our catalog.

Tinnerman Steel Range Co.
CLEVELAND, O.

FAVORITE STOVES

IF IT'S COOKED
ON A FAVORITE IT MUST BE EXCELLENT

THE ONLY BEST

WE GUARANTEE "FAVORITE" STOVES AND RANGES "BEST IN THE WORLD"

LOOKERS, HEATERS AND COOKERS

ASK ABOUT THEM.

Farwell, Ozmun, Kirk & Co. ST. PAUL, MINN.

FAVORITE RANGES

Actual Heating Capacity

and cost of running are the most important points to consider when you buy a heater. Include in the cost of running, fuel, time and labor and repairs.

Expense, time and labor are all saved (repairs are almost never needed) if you have a

RICHMOND

Steam or Hot Water **HEATER**

And you get a greater volume and a greater uniformity of heat.

SEND FOR THE CATALOGUE.

THE RICHMOND STOVE CO., Norwich, Conn.

WESTERN BRANCHES:
CHICAGO HEATER & SUPPLY CO., CHICAGO. RUMSEY & SIKEMEIER, ST. LOUIS.

Sun Stove Company

MANUFACTURERS OF

The Celebrated Sun Stoves,
Gasoline, Oil and Gas Stoves,
Air Tight and Hot Blast Heaters,
Gasoline Lamps, Torches and Ovens.

1305 to 1319 Bellevue Ave.,
DETROIT, MICH.

Registers and Ventilators.

A Full Line, Unique Designs.

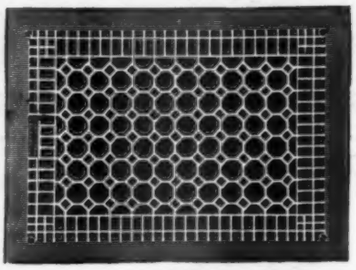
Quality and finish unexcelled. All styles of finish, from Japanned to Gold Plated.

Send for Catalogue:

The Philadelphia Hardware and Malleable Iron Works
Philadelphia, Pa.

HENRY & SCHEIBLE CO.

SUCCESSORS TO T. E. HENRY
10 Long St. - CLEVELAND, O.



All Sizes—All Styles of Finish
PROMPT SHIPMENTS
Quality and Finish Unexcelled
SEND FOR CATALOGUE.

C. H. COSBY'S

Patent Air Tight Baker and Heater.

Agents wanted in every town and city.
Write for particulars.

C. H. COSBY
423 W. Broad st.,
RICHMOND, Va.

IF you wish your prosperity to be continuous make your advertising continuous One begets the other.—The World.

The Champion Steel Range

Has the only double flue Hot Blast construction and is guaranteed to give satisfaction with any kind of fuel. They are finished in Japan and polished steel or Russia iron.

CHAMPION STEEL RANGE CO.

CLEVELAND, OHIO.

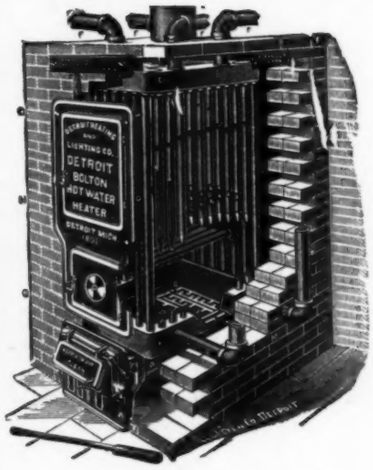
We are represented by the following houses: Lee-Glass-Andreesen Hdw. Co., Omaha, Neb.; James Graham & Son, San Francisco, Cal.; Michigan Distributing Co., Lansing, Mich.; J. M. Litchfield, New York, N. Y.; Kettlesen & Degetas, Chihuahua, Mex.; Moore-Handley Hdw. Co., Birmingham, Ala.; Richards & Conover Hardware Co., Kansas City; Chicago Stove and Range Co., Chicago, Ill.; Jacob Retterer, Chicago, Ill.; Corbett, Failing & Robertson, Portland Ore.; Palmer Hdw. Co., Savannah, Ga.

This is our popular little **Gas or Gasoline Oven** Bakes 2 pies, largest size, at one time. Will bake two pans of biscuits in 10 minutes. Will roast a chicken or bake a pudding. Takes 10½ in. pans, crated 6 in crate, 65c each F. O. B.

Graves Sheet Metal Works, Kansas City, Mo.

Established 1874.
The largest and most reliable **Foundry Supply House** in the world.

THE
S. Obermayer Co.,
CINCINNATI, OHIO.
CHICAGO, ILL.
manufacturers
"Everything You Need in Your Foundry."
Importers and refiners
PLUMBAGO GRAPHITE.
Catalog Sent on Application.



HEAT

The BOLTON HOT WATER HEATER keeps the home at an even comfortable temperature at all times at small expense.

LIGHT

The COMBINATION GAS MACHINE and MIXING REGULATOR gives a light stronger than electricity and cheaper than kerosene oil. Let us send you catalogue and show you how we can be of service to you and your trade.

DETROIT HEATING AND LIGHTING CO.,

DETROIT, MICH.

BURT HOSTERMAN, MARSHFIELD, WIS., Writes:

"I do not think any hardware man has any business to start a hardware store without your paper."

UTICA HEATERS

WORK PERFECTLY IN PUBLIC BUILDINGS

This is only one Letter—We have dozens more, all unsolicited, "up our sleeve."

BURGERT & BANISTER.
Builders' Hardware, Stoves, Tinware and House Furnishings.

GALION, OHIO, March 26, 1902.

UTICA HEATER CO., Utica, N. Y.

GENTLEMEN: The "Utica Heater," which we put into the Public Library building here, is proving a profitable piece of public spiritedness for us.

The Directors and Patrons of the Association are very generous in their applause of the heater, giving us all kinds of free advertising.

The president tells us that they heated the building one week with 30c worth of coke, — and in cold weather at that.

We have sold one big job on the strength of it, and have several others in view.

We are pretty well satisfied with the deal in general, and the Utica heater in particular.

Yours truly, BURGERT & BANISTER.

UTICA HEATER.

We Manufacture Hot Air Furnaces

11 different styles, 48 different sizes, for all possible requirements.

We also Manufacture a Very Extensive Line of Steam and Hot Water Boilers

10 different styles, 128 different sizes.

Drop a Card to-day for our Illustrated Catalogues and Circulars, and we will gladly quote you rock-bottom discounts. "They will do you good."

UTICA HEATER CO.

MANUFACTURERS
UTICA, N. Y.

Monitor.. Furnaces

Can you remember? If not, history records that some time during the 60's the **Monitor** had a struggle for supremacy and won out, and the **Monitor** line of **Furnaces and Combination Heaters** are winning favorably with the trade throughout the West. The dealers who handled this line in past years still continue, which is the best possible evidence of superiority. The **"Best at a reasonable price."**

Catalogues, Booklets and Folders sent on application.

Keith Furnace Co.,

Manufacturers
DES MOINES, IOWA

Largest Variety.
Latest Improvements.
Lowest Prices.
Most Reliable and
Economical

1902 will be a Record Breaker

STEAM HEATER.

Heating....

Apparatus

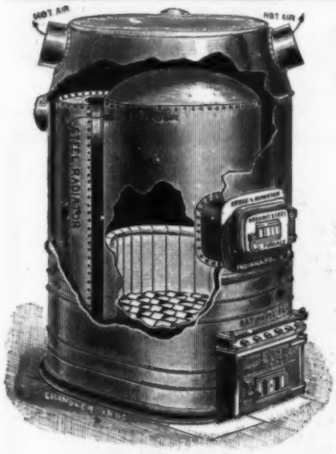
FURNACE.

Furnaces, Hot Water and Combination Steam Heaters.

A Postal Card will bring to you full descriptive Catalogs, Price Lists and Discounts.

The Boynton Furnace Co.

207-209 Water Street, NEW YORK 147-149 Lake Street, CHICAGO


The Monarch

KRUSE & DEWENTER

Manufacturers of

Annealed Steel and
Cast Iron Warm Air

FURNACES

427-429 East Washington Street
INDIANAPOLIS, IND.

Write us for complete catalogue and prices

The Globe

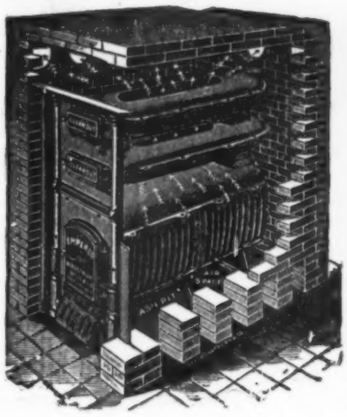
Emperor Furnaces

For Wood

Simple. Safe. Durable.
The Best and Cheapest
Line of Wood Furnaces.
Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

Bergstrom Bros Co.

Neenah, Wis.



All Cast Iron Double Radiator.

TALK ABOUT VARIETY

IF WE CAN'T FIT YOU OUT
NO ONE CAN

MUELLER

FURNACES AND BOILERS

MADE IN

16 DISTINCT STYLES

For All Conditions—For All Kinds of Fuel

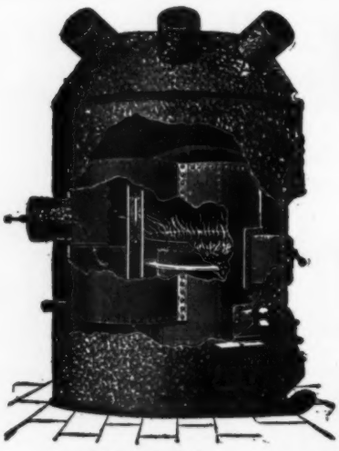
WRITE FOR CATALOGUE AND PRICES

For Wood.

ESTABLISHED 1857

L. J. MUELLER FURNACE CO.

191 Reed Street MILWAUKEE, WIS.



Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING Furnace.

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

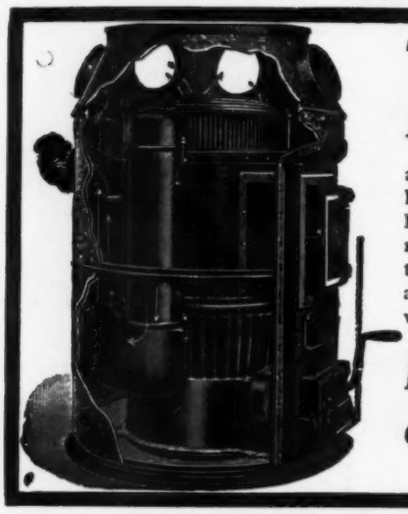
Manufactured by

Meyer Furnace Co.

Is Absolutely Safe.

Handy Pipe.

Send for Catalogue. **PEORIA, ILL.**



THE JUDGE'S MANSION

and the widow's cottage both require heating, but the same furnace would hardly do for both. The successful furnace dealer is one who handles a line like the **Floral City** which embraces warm air and combination heaters for any class of work or any kind of fuel.

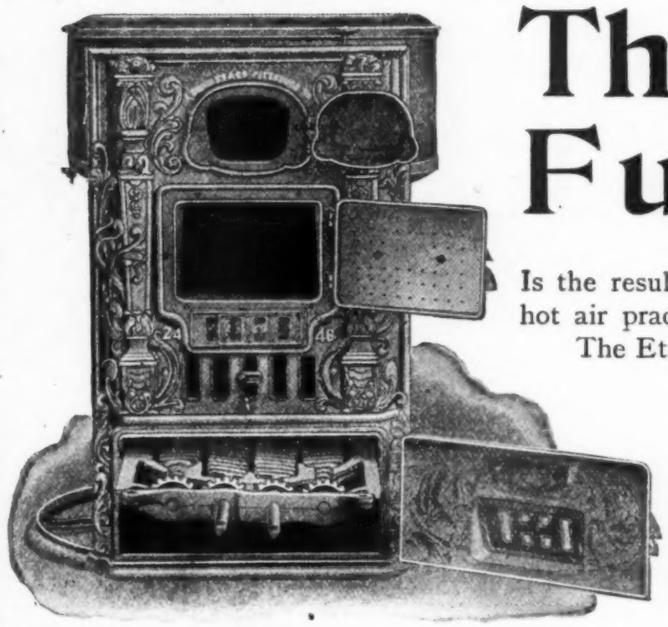
Monroe Foundry & Furnace Co.,

MONROE, MICH.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."



The Etna Furnace

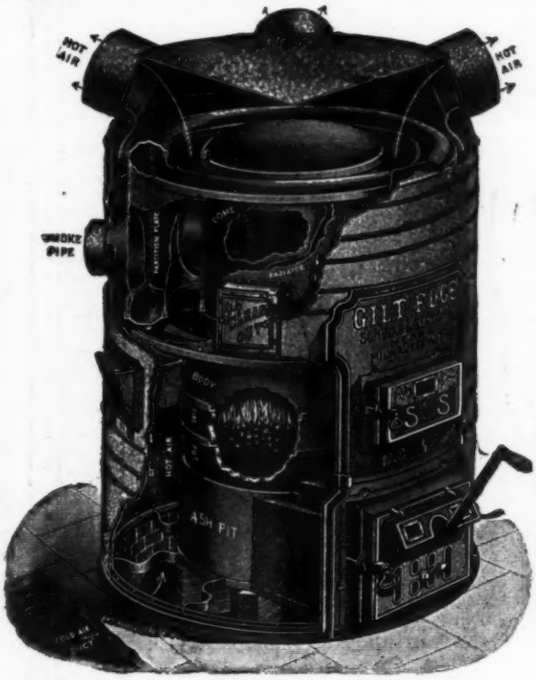
Is the result of twenty years' experience in hot air practice.

The Etna contains many strong, practical features not found in the majority of others. We feel satisfied they will meet the approval of every dealer who has been up against the heating problem and encountered its difficulties. We have smoothed out some of the rough places.

READ THE CATALOGUE. SENT FOR THE ASKING.

Pittsburgh Stove & Range Company

PITTSBURGH, U. S. A.

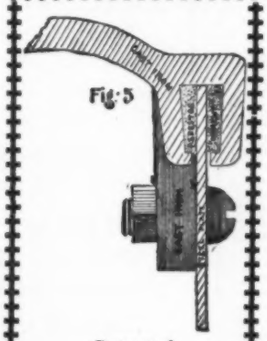


Gilt Edge Warm Air and Combination Heaters

have merits that are all their own. They are made in a large variety of styles and sizes, each adapted especially to a certain class of fuel. Our line is "gilt edge" in every sense of the word. Every furnace we make is correctly made in accordance with right principles, and the price is right. Kindly write us for catalogue.

R. J. Schwab & Sons Co.,

Milwaukee, Wis.



Patented

The Keystone Joint used on Gilt Edge Furnaces is the only permanent gas-tight steel and cast iron joint on the market.

JOHN H. ROBERTS,

Writes: "I consider **The American Artisan** a great help to any tinner or any man in business."

MUNHALL, PA.

ROUND OAK
STANDARD OF AMERICA

Long & Durr,
Harmon, Illinois,
write us under date
June 28, 1901:

"The Round Oak Furnace which we put in the school building here after your plans, has given the best of satisfaction, doing more than guaranteed. It is very economical and easily operated. The Board of Directors are highly pleased with the furnace."

We are the originators of the Round Oak System of school house heating with furnace heat.

Where our plans are used we have never failed to give perfect satisfaction.

Should any business of this character offer in your territory at any time and you advise us we will give it prompt attention and guarantee results.

Estate of P. D. Beckwith
Dowagiac, Michigan

MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

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CHICAGO, APRIL 5, 1902.

A PERNICIOUS bill has been introduced into the New Jersey Legislature providing that any corporation organized under the general act, which has issued cumulative preferred stock may, with the consent of two-thirds of the stockholders present, in person or by proxy, at a meeting of stockholders called for the purpose, provide for the retirement of any or all shares of the preferred stock.

THE Iron Trade Review calls attention to the accuracy of various prophecies as to future pig iron production. In 1856 Abram S. Hewitt estimated that the pig iron production of 1875 throughout the world would be 14,000,000 tons. It was within a few thousand tons of this amount. In 1890 Mr. Hewitt made a prediction that in 1900 the United States would produce 15,750,000 tons of pig iron, and the world's production would be 35,000,000 tons. The actual production in this country was 13,789,242 tons, and the world's production was 40,400,000 tons.

THE Hardware Trade Journal, London, Eng., in the course of an article on the necessity of hardware dealers dressing their shop windows handsomely, says: "If only a greater number of ironmongers appreciated more fully the laws of color contrast, or made a more complete acknowledgment of the eternal law of the fitness of things, one's eyes would be more frequently gladdened than saddened by the displays seen in too many windows. We have seen—more than once—such things as pea guards, the most ordinary of ordinary wire-work, dumped higgledy-piggledy into a window supposed to be artistically—save the mark!—set out by a window dresser who has the audacity to make pretensions to a knowledge of the work he has undertaken. Pea guards and wire-work are lines which must come to the front in due season, but why in the name of common sense should their hideous bareness be exhibited by the side of beautifully shaped wares?"

The Shepherd Boy and the Wolf. THE shepherd lad in Esop's fable did not find the lazy watching of placid sheep to afford him the strenuous life he desired, so he raised the cry of "Wolf!" "Wolf!" and had the pleasure of seeing the peasantry, armed with pitchforks, fish spears and other improvised weapons, arrive at the pasture in a breathless and expectant condition. So pleasurable was this cheap diversion that oftentimes would the lad indulge therein.

The wolf finally came and the people responded not to the frantic cries of the sheep's guardian.

It is unfortunate that innocent parties should suffer and in this case the innocent owners of the sheep were the real sufferers unless there existed some Employers' Indemnity Company or Agricultural Insurance Association in those days.

For several years the traveling stove salesman has been dinning into his customers' ears the necessity of early orders of stoves in order to avoid a stove famine in the fall. So fluent a tale have these travelers told in many instances that the retail trade have come to believe that if they did not turn their orders in very early the fall would find them stoveless. October has arrived with its accustomed regularity, and while the last two or three years there has been more or less congestion and delay in filling orders, there has been no actual famine. Naturally, therefore, some of the retail trade have become used to the "Famine!" "Famine!" cry of the traveling men, and now look on this appeal as one of the tricks of the trade, and have shown a disposition to relapse into their old-time policy of procrastination.

Early buying is desirable *per se,* and it certainly behooves every stove dealer to get his stock of stoves for 1902 in his storage room earlier than he did in 1901. It really looks as though the famine were coming this year. The demand for iron in all forms is sharp and imperative, manufacturers of steel rails, structural material, furnaces, steam and hot water heaters, agricultural implements, etc., are all pressed for pig iron, and are making demands on the pig iron men for prompt deliveries. This unusual activity in iron and steel must sew up a number of weaker brethern in the stove manufacturing world and prevent the year's actual output of goods from reaching the estimates made at the beginning of the year.

The stove dealer with the memory of the impassioned diatribes of salesmen made last April yet ringing in his ears, very likely was fortunate enough to secure his goods without suffering from the hampered deliveries, particularly of steel ranges, that made quite a hole in the pockets of some of his brother dealers, and hence looks on their reiteration of their previous statements as a false alarm. These dealers are taking a grave risk, however, as "Demand" is at present wearing seven league boots and is putting a wide gap between himself and his old time friend, "Supply," who as a rule is in the lead.

To make a mild bull we would state that the present is one of the safest times to be on the safe side that has occurred for many a moon—at least insofar as regards the early purchase of stoves. The false alarm of "Famine!" "Famine!" made in previous years bids fair to become a stern reality in the 1902 stove market.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

THE HARDWARE trade are enjoying their fair share of the wave of prosperity that is inundating the country. Last week I was glad to chronicle that "The Toronto Hardware Company to-day sold a top buggy and an oil wagon to Sutton Bros. of Turkeyfoot."

Following this buggy sale from Ohio, comes the following lawn roller sale in Minnesota, for which we are indebted to the lynx-eyed newsgatherer of the Worthington (Minn.) Advance of March 24th: "Hardware Dealer Hartley received a large, heavy iron hand lawn roller Monday for Harry Robson. Harry is going to beautify his already fine residence by improving the lawn, which adds greatly to the attractiveness of any place and village."

Worthingtonians now have additional cause for pride in their pretty little city. Visitors can be taken to see the Hobson lawn and children coming home from school can glue their bright eyes to the palings of the front fence and watch the stalwart Mr. Hobson exercising with "a large, heavy iron hand lawn roller."

* * *

HISTORY may have crowned the temples of a goodly bunch of blue-eyed Saxons with the laurels of seventy years. Embittered foes, according to Wendell Phillips, may have done the same trick for Touissant L'Ouverture. Fulton, Stephenson, Morse, Edison, Tesla and Marconi may all occupy pedestals in the halls of immortal fame; Westminster Abbey may be crowded; but even if some choice reputations of the misty past are pushed aside, room must be made in the galaxy of the world's great men for R. C. Mudge, who is advocating low-priced automobiles for the masses. As one of the citizens that go to make up that conglomeration styled "the masses," I am with Mudge for the cheap automobile. Let us all have automobiles. May they be so common that one cannot see across the street for the cirrus clouds of escaping steam. May the joyous chug-chug of the horseless age reverberate unceasingly on city street and country lane!

* * *

WE are rapidly approaching a condition of affairs in which the business man who is not engineering a merger of something or other is looked upon as slow. All kinds of manufacturers, steel makers and shoe makers, rope makers and bicycle makers have been garnered into consolidations. Railroads are pooling interests in securities companies which bid fair to box the compass from a titular standpoint. There are more different stories about the hardware jobbing merger than there are hardware jobbers in the country. It is capitalized for $30,000,000. It is capitalized at $100,000,000. It is being financed in New York. It is being financed in St. Louis. It has succeeded. It has failed. It will take in all the leading jobbing houses of the country. It will take in only five jobbing houses. It will take in only four jobbing houses. It was originally started by the Simmons Hardware Co. The Simmons Hardware Co. were induced to enter the scheme only after the most persistent solicitation and the most liberal offers. The National Hardware Association is behind the scheme. The National Hardware Association is not behind the scheme, but is neutral in its attitude. The National Hardware Association is fighting the scheme.

Revenons a vos moutons; I would state that a retail hardware trust is the very latest, according to the Chestertown (Md.) News, which says:

"A movement has been started by Daniel Crook, a well-known hardware dealer in Baltimore, to form a stock company to operate all the hardware stores in the state under the "chain" system. Mr. Crook has been in business over thirty years. He is president of the Gaither Express Company, and it is his avowed intention to hereafter devote all his attention to that company's interests. George L. Mowen, a manufacturers' agent, with office in the Equitable building, Baltimore, is promoting the plan. It is hardly likely that the country merchant will be induced to go in the combine."

The operation of all the retail hardware stores in Maryland is a big thing, but then these are the days of big things. If by hook or crook this scheme goes through in Maryland and proves a winner I am a bidder for the privilege of organizing any of the western states that are looking for a chain system promoter.

* * *

I saw an interesting *canard* recently to the effect that the British ironmasters have unitedly invited European iron men to form a gigantic combination to maintain prices in view of the American demand for pig iron. There are, however, many difficulties, one being that the Belgians and Germans can sell, if not produce, pig iron cheaper than the British.

* * *

These are the days when some people feel "automobilious." These victims of the horseless age craze will be pleased to learn that a German inventor has invented a new power for running these machines which is generated by the expansion of gases produced by a low grade kerosene. The prospective cost of the new power will not exceed ten cents an hour a ton. A pleasure wagon, carrying two persons, will carry forty miles with five cents expense, figuring on five cents a gallon for crude oil. The American capitalists who are interested in the invention paid $600,000 in cash for all the American rights.

* * *

I HEARD the other day that the American Can Company lost $1,000,000 by ordering tin plate from Wales at the opening of the steel strike last summer, the stock arriving when the strike was over and prices paid abroad representing that amount in excess of American prices.

Of course such a tale as this must be taken *cum grano salis.*

* * *

THE hardware fraternity necessarily have door pulls and drawer pulls, and they have as a rule good political pulls, too. At least the leading paper in one of our western capitals seems to think so, for it says: "The sidewalk in front of Blake & Co.'s hardware store has been out of fix ever since last spring, and it is evident that rank favoritism has been exercised in this matter. Some weeks ago there was a board loose in the walk in front of this office and in less than two hours an officer served notice on us to fix our sidewalk. Such con-

duct as this on the part of public officials has almost persuaded us to join the ranks of the political reformers, deny everything and get somebody else to do our dirty work."

It is too bad this paper should get mad like this and make so many nasty innuendoes all over a few loose planks.

* * *

THE St. Louis Post-Dispatch has involved an ingenious idea of its very own for the proposed hardware merger, as it says "Some of the heads of the great hardware houses are tired of working and, being wealthy, are anxious to retire. Having such large capitalizations they cannot sell to individuals and so the trust idea pleases them immensely, for it enables them to get at their money for such use as they may wish to put it to."

* * *

THE news of the Chicago conference has traveled even to the peaks of the Rockies, as is shown by this alleged facetious outburst from the Pueblo (Colo.) Chieftain of March 22: "The National Retail Hardware Association is in session at Chicago. It is supposed to be opening a keg of nails."

* * *

GEO. J. SEABURY, New York, publishes a little pamphlet in which he discusses the constructive and reconstructive forces that are essential to maintain American international commercial supremacy. In this pamphlet I find the following functions proposed for a projected department of commerce and the industries:

It should govern and control the consular service.

It should scientifically adjust all tariff inequalities, especially in the classification of merchandise.

It should be the court of appeals on disputed appraisements that take place at any of our ports of entry.

It should issue all consular reports for distribution among those engaged in foreign trade and commerce.

It should have, in short, general supervision over our domestic and foreign trade and commerce in all of its ramifications.

It should have an analytical laboratory for the examination of drugs, chemicals, textiles and crude materials entering our ports.

It will arrange all commercial reciprocity treaties that do not injure our home industries, mathematically and on their merits as such.

It should consider all questions pertaining to an American merchant marine, transportation and regulations, or suggest them to the Congress.

It will give home and foreign statistics on trade and commerce, imports and exports, and classify them, which is of great value to our home industries and opportunities.

* * *

B. H. ONKEN, of Peoria, read a paper before the Illinois Laundrymen's Association at their last annual meeting on the treatment of employes, in the course of which he made the following suggestions for the guidance of employers:

To be successful you should be a good judge of character.

You should know whether the employe would be competent to fill the position.

You should know whether the employe will be satisfied with the salary given.

You should be careful and employ only those you think will be honest and true and do their work well.

You should know what to expect definitely of your employes; they should regard you as their employer, but you should also give those employes something definite to expect of himself or herself and let their character be decided and unchangeable.

An employe will do work that he likes better than work he dislikes. This is natural, so if possible put an employe in a position that suits him; if this cannot be done try to arouse their interest in the work and they will soon grow to like it.

Teach them that their salary depends not so much on the work to be done as on the manner in which it is executed.

Sometimes it is not a bad idea for the betterment of outsiders to take a poor worker and give him a course in your school.

Do not be a stranger to your employes.

Have wise rules and teach your help that they are for your mutual benefit, and then see that they are observed.

Teach your employes that they have an interest in the business to the amount of their salary.

If you are in doubt as to the expediency of a measure or rule show confidence in your help and ask their opinion; reason with them.

* * *

MOST European manufacturers are not freely opened to outsiders and it is difficult for any one not connected with a concern in some capacity to obtain admittance under any pretext. American manufacturers pursue a diametrically opposite policy. Secretiveness as a shop policy may have certain advantages, but it is doubtful if they compensate for disadvantages thereby entailed. It is certain that such a policy cannot make up for progressiveness, and progressiveness seems impossible to any great extent when secretiveness is the rule.

* * *

THE MANUFACTURERS of the country are now importing more than a million dollars' worth of materials for their workshops every day in the year, and are exporting more than a million dollars' worth of their finished product each day. The imports of manufacturers' materials in the eight months ending with February, 1902, were, according to a statement just issued by the Treasury Bureau of Statistics, $270,202,774, and the exports of finished manufactures during the same period were $257,907,430. Thus in 243 days of the fiscal year the manufacturers have imported $270,000,000 worth of material and exported $257,000,000 worth of their finished product, thus averaging more than $1,000,000 of both imports and exports for every day of the fiscal year up to the beginning of the present month. The importation of manufacturers' materials has been greater in the eight months just ended than in the corresponding period of any preceding year.

HARDWARE AND METAL, our Canadian contemporary, certainly deserves a pat on the back for its interesting and attractive 174 page spring number.

News Siftings.

The Cuyahoga Stove Repair Co., Cleveland, Ohio, are erecting a factory.

The Sun Stove Co., Detroit, Mich., have increased their capital stock from $40,000 to $100,000.

William R. Snead, president of Snead & Co. Iron Works, Jersey City, N. J., died recently from apoplexy.

The Mason Heater Co., Bellaire, Ohio, have been incorporated with a capital stock of $100,000 for the manufacture of heaters, stoves and ranges.

The Malleable Iron Range Co., Beaver Dam., Wis., held their annual meeting last week and decided to make extensive additions to their building equipment.

The Carrollton Oil & Mfg. Co., Carrollton, Miss., are in market for machinery for an oil mill plant, electric light plant and ginnery. Inquiries should be addressed to Claude R. Horne.

Another proof of the value of local organization comes from Bath, Me., where the stove dealers have come and adopted a uniform price for removing and storing coal stoves during the summer months.

The Minneapolis Stove Co. will move to the northeast corner of 12th avenue, South and Third street, Minneapolis, where they will have a new building 42x140 feet in dimensions, two and one-half stories high, which will cost about $40,000.

J. B. Everett, J. W. Hastings, J. C. Campbell, L. E. Jones and B. A. Welling have incorporated the Columbus Stove Co., capitalized at $50,000, and are rebuilding what was formerly the Eagle Foundry in Cincinnati, and rearranging it for the manufacture of steel ranges.

The Atlas Bolt & Screw Co., Cleveland, O., have many customers in the stove trade who are heavy purchasers of their line of goods, which include stove bolts, stove rods, machine screws, pointed pins, threaded wires, rivets, special bolts, mica bolts and cold pressed nuts.

The International Nickel Co. were incorporated in Trenton, N. J., on March 29th, with a capital stock of $24,000,000, of which $12,000,000 was six per cent cumulative preferred and $12,000,000 was common. In addition to this the company propose to make a bond issue of $10,000,000.

The Gobeille Pattern Co., Cleveland, O., are sending out the following double-header to the trade: "Mr. Charles H. Meigs, sometime secretary of the Gobeille Pattern Company, is no longer connected with said company in any capacity. Have you patterns to make? Try us. Largest and best shop in the world."

Hess, Snyder & Co., Massillon, O., send us a circular describing their Boomer Oak, made in three sizes, with either cast or steel body, for coal or wood. This stove is entirely new and original throughout. The doors and slides have double joints and are fitted tight. The feed door contains a smoke and gas burner, which spreads the air or oxygen over the surface of the fire, consuming the gases. The stove has a large ash pan, fire pot lined with cast iron linings in five sections, and draw center grate for coal. The base ring, brackets, two name plates, top rings, knobs and hinge pins are nickel-plated.

The March-Brownback Stove Co., Pottstown, Pa., held their annual meeting last week and re-elected the following directors: Franklin March, A. F. Shaner, James Brownback, Dr. J. E. Porter, Mufflin W. Bailey and James Rodgers; the board of directors then re-elected the following officials: Franklin March, president; James Rodgers, vice-president; Horace Ebert, secretary, and T. J. March, treasurer.

A disastrous fire on the morning of April 1st destroyed the building, 615-621 Austin avenue, Chicago. Among the victims are the Voss Mfg. Co., manufacturers of wire goods, who occupied the first and second floors. The loss to their machinery and stock is $19,000. The fourth floor of this building was occupied by the Faultless Mfg. Co., manufacturers of steel ranges, whose loss was $15,000, $12,000 of which is covered by insurance.

STOVE MOLDERS GET HIGHER WAGES.

The conference between the Stove Founders' National Defense Association and the Iron Molders' Union of North America, which was held at the Auditorium Hotel, Chicago, lasted March 27, 28 and until 1:10 a. m. on the morning of March 29. The molders asked for a 10 per cent increase and a protracted deadlock ensued, which was broken on Saturday by the molders accepting a 5 per cent increase.

The Stove Founders' National Defense Association were represented by C. H. Castle, Comstock-Castle Stove Co., Quincy, Ill.; Henry Cribben, Cribben & Sexton, Chicago; Jeremiah Dwyer, Michigan Stove Co., Detroit; A. C. Mott, Abram Cox Stove Co., Philadelphia; Lazard Kahn, F. & L. Kahn & Bro., Hamilton, O.; and E. W. Peck, Co-operative Foundry Co., Rochester, N. Y. Martin Fox, David Black, Lawrence O'Keefe, J. P. Recktenwald, William Rogers and D. M. Shalkop appeared for the Iron Molders' Union.

The result of this conference will stiffen the market. The molders will now make large wages and in order to pay these higher wages it is very likely that stove manufacturers will be obliged to advance their selling prices to cover this advance in the cost of production.

STRIKING EXTENSION OF HOT BLAST IDEA.

John B. Ehrlich, Indianapolis, Ind., has invented a combined hot blast and smoke consumer for ranges and cooking stoves. The results obtained by Mr. Ehrlich consist in procuring air through ingress bowls, which are secured to and located near the rear of the top of the range or stove, and conveying this air through a specially constructed pipe, which extends horizontally into the fire pot of the range or cooking stove, and thence discharging the air from the horizontal flaring pipe, through semi-circle slots, over the point of combustion. The object is to heat the air before discharging it, thus effecting a better ignition and combustion of the gases which arise from the fire. With the use of this invention, which can be attached to any stove or range, Mr. Ehrlich says, a greater num-

ber of units of heat is procured from the same amount of fuel consumed under the present methods, while the relative ratio of radiation is correspondingly increased. He says that besides a considerable reduction in the cost of maintaining a fire there is the abatement of the smoke nuisance.

The hot blast is an old story as regards heating stoves, and has been very successful in quickening combustion, but this is, we believe, the first time it has been used on cook stoves.

WILL MEET IN CHARLESTON.

There will be a meeting of the Southern Supply and Machinery Dealers in Charleston, N. C., on April 15th-17th, for the purpose of organizing an association.

One of the most important objects of the proposed association is the bringing together of the manufacturers and jobbers. These two branches of the trade are so closely connected that what benefits one necessarily benefits the other, and it is the general opinion that closer relationship should be cultivated, and to this end the supply and machinery dealers would be very glad to be favored with the presence of as many manufacturers and their representatives as can find it convenient to attend the meeting. On account of the fact that the Charleston Exposition is in full swing, it is thought that there will be quite a large delegation from the manufacturing interests.

The headquarters of the association will be at the Argyle Hotel, special rates having been granted by this hotel. On account of the exposition now being held in Charleston, very low rates are being offered by the railroads.

U. S. STEEL STATEMENT.

A directors' meeting of the United States Corporation was held April 1st. They ratified the plan for issuing $250,000,000 5 per cent bonds and approved of the first annual statement of the company which shows net earnings for the twelve months ended March 31 of $111,067,195. The earnings for March are estimated.

A feature of the statement of this company is that it is explicitly set forth that the net earnings of the corporation were arrived at after deducting, each month, the cost of ordinary repairs, renewals and maintenance of plats, and interest on the bonds and fixed charges of the subsidy companies. This sets at rest for all time the argument that the term "depreciation and reserve funds" which, according to the annual statement, aggregates $12,339,782, represents all that had been set aside for ordinary repairs, renewals, maintenance, etc. It is explained that the amount set aside under the head of "depreciation and reserve funds," is for extraordinary expenses such as exhaustion of ore and coal properties. The undivided earnings for the year applicable to increase, depreciation and reserve and fund accounts, new construction of surplus, etc., aggregates $24,449,717, as compared with $19,414,497 reported on Dec. 31st last, an increase for the last quarter of $5,035,220, which is slightly below the average.

The sinking funds on United States Steel Corporation bonds, and bonds of the subsidiary companies amounts to $3,059,913, as compared with $2,263,292 on Dec. 31. The reserve funds show an increase of $2,644,080, as compared with the last quarter. The dividends on the preferred stock for the year aggregated $35,682,832, and common $20,309,601, a total of $55,992,433. There was paid in dividends on outstanding stocks of subsidiary companies, $25,350, a total in dividends for the year of $56,017,783. The interest on United States Steel Corporation bonds for the year amounted to $15,200,000, making total disbursements of dividends and interest of $71,217,783.

The net earnings from operations for the year ending March 31, are as follows:

April, 1901	$ 7,356,744
May, 1901	9,612,349
June, 1901	9,394,747
July, 1901	9,580,151
August, 1901	9,810,880
September, 1901	9,272,812
October, 1901	12,255,774
November, 1901	9,795,841
December, 1901	7,758,298
January, 1902	8,901,016
February, 1902	7,678,583
March, 1902 (estimated)	9,700,000
Total net earnings	$111,067,195

CYLINDER DUST BELLOWS.

The Smith & Hemenway Co., 296 Broadway, New York City, are manufacturers of the cylinder dust bellows shown in the accompanying cut. This bellows is designed for use in printing offices, factories, machine shops, and telephone or telegraph establishments. This bellows has no metal mountings, thereby preventing short circuits while cleaning. Any places that cannot be reached by a brush can be cleaned with a cylinder dust bellows, the compressed air removing all particles of dust from inaccessible places. The principal advantages of these bellows are steady position of the point (on holding it between the fingers); absence of metal mounting, and therefore no risk of injury to the articles to be cleaned; easy and comfortable manipulation; employment of force according to will; direction in any position; introduction to any space proportioned to the cylinder and therefore the displacement of dust in otherwise inaccessible places without injuring the articles cleaned. These bellows are made with the greatest care.

The Crescent Iron Works, Springfield, Mo., send us some pretty little calendars for 1902 showing a picture entitled: "When Thieves Fall Out." The thieves in question are a small boy and girl who have been robbing a grape vine, and are at variance concerning the distribution of the spoils.

The Hardware Record.

American Hardware Manufacturers Association.
Pres., Fayette R. Plumb, Philadelphia.
V.-Presidents, Samuel Nicholson, Providence; C. S. Van Wagoner, Cleveland. F. S. Kretsinger, Fort Madison, Ia.
Secy-Treas., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Chairman, Pittsburg, Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S. McKinney, Allegheny, Pa.; Samuel Disston, Philadelphia; C. E. Adams, Cleveland; James F. Kelly, Alexandria, Ind.; J. C. Birge, St. Louis.

Arkansas Retail Hardware Dealers' Association.
Pres., John M. Pitman, Prescott.
1st V.-P., J. F. Maxey, Ozark.
2d V.-P., T. B. Stewart, Newport.
Secy-Treas., J. A. Plummer, Marianna.
Ex. Com., H. Williams, Hot Springs; J. H. Boicourt, Little Rock; J. W. Lee, Fordyce.

Chicago Retail Hardware Dealers' Association.
Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Association of Philadelphia.
Pres., William C. Peters.
V.-P., Thomas Devlin.
Sec.-Treas., T. James Fernley.
Directors, W. W. Supplee, H. McCafftey, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Illinois Retail Hardware Dealers' Association.
Pres., H. G. Cormick, Centralia.
V.-P., D. Holder, Bloomington.
Sec., L. H. Clark, Rockford,
Treas., F. F. Porter, Chicago.
Ex. Com., H. G. Cormick, Centralia; D. Holder, Bloomington; L. H. Clark, Rockford; F. F. Porter, Chicago; Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; R. G. Scheurer, Vandalia; F. W. Siecke, Freeport.

Indiana Retail Hardware Dealers' Association.
Pres., W. P. Lewis, New Albany.
V.-P., Jas. L. Fulton, Portland.
Sec. and Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hardware Association.
Pres., Geo. W. Mowbray, Tulsa.
1st V.-P., J. G. Smith, Canadian.
2d V.-P., Fred Parkinson, Wagoner.
Treas., Sam R. Frazee, Vinita.

Iowa Retail Hardware Dealers' Association.
Pres., W. A. McIntire, Ottumwa.
V.-P., J. Seither, Keokuk.
Sec., W. H. Keating, Ottumwa.
Treas., Geo. Lister, Manchester.
Ex. Com., J. Seither, Keokuk; Clarence Phillips, West Liberty; L. Lindenberg, Dubuque; T. J. Lomas, Cresco; C. F. Schmidt, Marshalltown; Homer Duncan, Albia; L. H. Kurts, Des Moines; C. R. Keating, Mt. Ayr; Chas. Swaine, Council Bluffs; H. S. Vincent, Ft. Dodge; W. H. Millard, Cherokee.

Kansas Hardware Dealers' Ass'n.
Pres., Oscar Roehr, Topeka.
V.-Pres., E. J. King, Logan.
Sec'y-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neil, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., W. T. Oldham, Mt. Sterling.
1st V.-Pres., J. L. Malin, Vine Grove.
2nd V.-Pres., W. S. Schacklett, Fulton.
Sec., Paul Wagner, Louisville.
Asst. Sec., Joseph C. Kirchdorfer, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.
Pres., H. C. Minnie, Eaton Rapids.
V.-P., Geo. W. Bruske, Saginaw.
Sec'y-Treas., H. C. Weber, Detroit.
Assistant Sec., C. A. Day, Detroit.
Ex. Com., Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marion City; James J. Potter, Alpena; Jno. W. Jochin, Ishpeming; Robt. G. Chandler, Coldwater; John Popp, Saginaw, F. Carlton, Calumet.

Minnesota Retail Hardware Ass'n.
Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., T. McCracken, Minneapolis.
W. H. Tomlinson, LeSueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; A. C. Hatch, Battle Lake Jos. Mason, St. Peter; C F. Ladner, St. Cloud; J. Schmidt, Wabasha; E. H. Loyhead, Faribault; A. T. Stebbins, Rochester; J. McGuire, St Paul.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Ed L. Wachter, St. Louis.
Sec.-Treas., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrolton; F. A. Kannsteiner, St. Louis; Frank Mayer, Macon.

National Hardware Association.
Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley Philadelphia.
Ex. Com., W. K. Belknap, Louisville; Samuel A. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

National Retail Hardware Dealers' Association.
Pres., H. G. Cormick, Centralia, Ill.
V.-P., C. N. Barnes, Grand Forks.
Sec., M. L. Corey, Argos, Ind.
Treas., W. Bogardus, Mt. Vernon.
Members Ex. Com., W. P. Bogardus, Mt. Vernon, O.; O. P. Schlafer, Appleton, Wis.; C. F. Ladner, St. Cloud, Minn.; W. A. McIntire, Ottumwa, Ia.; Sharon E. Jones, Richmond, Ind.

North Dakota Retail Hardware Dealers' Association.
Pres., H. N. Joy, Hamilton.
V.-P., H. F. Emery, Fargo.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., H. Harrington, Fargo. W. W. Jamieson, Wahpeton; Anton Enger Cooperstown; Frank Lish, Dickinson; H. F. Strehlow, Casselton. I. L. Newgard, Grafton.

Ohio Hardware Association.
Pres., W. P. Bogardus, Mt. Vernon.
V.-Pres., L. F. Stahler, Waverly.
Corres. Sec., D. R. Burr, Piqua.
Fin. Sec., Will C. Jones, Columbus
Treas., H. A. Waller, Ravena.
Ex. Com., J. B. Carson, Hamilton; C. D. Cussins, Columbus; C. W. Jewell, Utica; M. B. Tallmage, Mt. Gilead; H. F. Rahe, Cleveland; J. Rohrbacher, Akron; A. H. Strome, Wausau; Geo. B. Meyer, Cincinnati.

Pennsylvania Retail Hdw. Ass'n.
Pres., Geo. L. Moore, Brownsville
V.-P., Geo. J. Rudolph, Pittsburg.
Sec'y, J. F. Frye, Charleroi.
Treas., B. A. Maggine, Braddock.
Ex. Com., A. L. Casselbury, Pittsburg; E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

Philadelphia Hardware Ass'n.
Pres., Julius M. Aff.
V.-P., C. F. Geissler.
Sec., T. B. Hendricksen.
Treas., Edward H. Shannon.
Trustees, Frank Schmidt, Aaron I. Sanson, Jr., Lewis C. Glading.

St. Louis Stove Dealers' Ass'n.
Pres., F. A. Kansteiner.
1st V.-P., Aug. Steinmeyer.
2d V.-P., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Ass'n.
Pres., J. D. Moore, Birmingham.
1st V-P., F. A. Heitman, Houston.
2d V.-P., Bruce Keener, Knoxville.
Sec., C. B. Carter, Knoxville, Tenn.
Ex. Com., W. M. Crumiey, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, N. C.; B. F. Eshleman, New Orleans.

Texas Hardware Jobbers' Ass'n.
Pres., F. A. Heitman, Houston.
1st V.-P., J. C. Bering, Houston.
2d V.-P., Ed. Strauss, Waco.
Sec.-Treas., Robert Eikel, Houston
Ex. Com., Jas. Moroney, Dallas; R. F. Bell, Weatherford; W. L. Sanford, Sherman; A. E. Goeth, Austin.

Wisconsin Hdw Dealers' Ass'n.
Pres., O. Schlafer, Appleton.
V.-Pres., L. Findiesen, Green Bay.
Sec'y-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; A. Noll, Chilton; H. L. McNamara, Janesville.

Sam Arnold, Rosemont, Neb., has sold his hardware store to Henry Arends.

S. J. Fair, Rockville, Neb., has sold his hardware store to W. M. Smerlser.

The City Hardware Co. are a new Lorain, Ohio, concern, capitalized at $20,000.

A. E. Morrison will engage in the retail harness and hardware business in Calloway, Neb.

Frank McGuire, Defiance, Ia., has sold an interest in his hardware business to Fred Hulsebus.

The Jackson Handle & Wooden Co. are contemplating moving from Chillicothe, Mo., to Kansas City, Mo.

A. H. Nichols, Louisville, Neb., has sold his hardware and furniture business to P. O. Esmay and C. R. Rogers.

The Buckley-Newhall Co., capitalized at $10,000, are a new New York City concern who will manufacture wringers.

Worden Bros., Hinsdale, Vt., hardware dealers, have assigned. Their liabilities are $22,000 and their assets $10,000.

E. H. Sprague & Co., of Orient, Ia., have bought the $7,000 stock of hardware and implements of the late J. J. Murphy, Bagley, Ia.

H. E. Olson, Stromsberg, Neb., has bought an interest in a Stromsberg, Neb., hardware store. The firm name will be Carlson & Olson.

The Weber Mfg. Co., Jamestown, N. Y., manufacturers of hardware specialties, have moved into more commodious quarters in that city.

John Hodder, August McNeill, and W. A. Hart are the incorporators of the Virginia Hardware Mfg. Co., New York City, capitalized at $10,000.

G. C. Gardner, D. Nickel and T. H. Hall are the incorporators of the Nickel Hardware Co., Morris., Ill., capitalized at $40,000, for manufacturing hardware.

Martin Berstich, Charles M. Moore, and Philip Lawrence are the incorporators of the American Steel Hinge Co., Huron, S. Dak., capitalized at $200,000.

Chas. P. Brecher, G. W. Buck and C. McGruder are the incorporators of the Brecher-Buck Co., Louisville, Ky., capitalized at $10,000 for dealing in mantels and tiling.

There are so many hardware dealers on First street, Portland, Oregon, between Washington and Salmon streets, that the district has received the name of "Hardware Road."

A. L. Nichols, A. B. Nichols, Mae C. Nichols, H. E. Nichols and Harriett E. Sewall are the incorporators of the Nichols Hardware Co., Sacramento, Cal., capitalized at $50,000.

The Clarksburg Hardware Co., Clarksburg, W. Va., have started excavations for their extensive jobbing house, which will be 100x100 feet in dimensions, and five stories high, costing $130,000.

Carl R. Chindblom, Carleton W. Brown and Robert N. Hopkins are the incorporators of the Algots and Brown Co., Chicago, capitalized at $6,000, for carrying on a general hardware business.

F. W. Heidel, who recently sold his interest in the firm of Heidel & Mason, Valley City, N. Dak., to Sam-

uel Mason, who in turn sold out again, will open up a new hardware store in that city shortly.

The Clinton Wire Cloth Co., Clinton, Mass., manufacturers of wire cloth, netting, fencing, highly perforated metal, etc., send us some neat blotters showing their "silver finish" brand of poultry netting.

J. W. Hopp has purchased an interest in the hardware business of N. M. Hinsdale at Springfield, Ohio, and the business will hereafter be known as the Hinsdale Hardware Co., capitalized at $25,000.

John V. Milner, a pioneer hardware dealer of Bloomington, Ill., died in that city on April 1st in his 74th year. Mr. Milner was a resident of that city for forty-eight years, and leaves a wife and four children.

The Luther Bros. Co., Milwaukee, Wis., manufacturers of hardware specialties, have incorporated with a capital stock of $50,000. S. S. Newton is president, E. J. Luther is secretary and treasurer, and Geo. Luther is vice-president.

Louis A. Sherbano, Frank E. Allen, Wm. H. Porter, Aug. Kinck and Joseph F. Austin are the incorporators of the Syracuse Machine Co., Syracuse, N. Y., capitalized at $10,000 for the manufacture of hardware specialties.

Henry R. Knight of Newlin, Knight & Co., Philadelphia, gave a complimentary dinner to the jobbing and wholesale hardware trade of Philadelphia in commemoration of the fiftieth anniversary of his business life on March 25th. Covers were laid for seventy-three guests, and T. James Fernley, secretary and treasurer of the National Hardware Association, acted as toastmaster. Brief addresses, mainly reminiscent of bygone days in the hardware business, were delivered by Samuel Disston, Charles M. Baily, W. C. Peters, J. C. McCarthy, J. R. Seltzer and others.

NO. 140 HAMMERLESS SINGLE GUN.

The accompanying cut shows the new No. 140 hammerless single gun, made by the J. Stevens' Arms & Tool Co., Chicopee Falls, Mass. This gun will be ready for the market about May 1st. It has top snap, special "pyro-electro" steel barrel, choke bored for nitro powder, walnut stock, rubber butt plate and case-hardened frame. It has pistol grip, checked and capped, with a patent forearm, checked. This gun has a new cocking device, by which it cannot be opened to insert a shell until the gun is at full cock. It also has automatic safety, making it impossible to discharge gun before it is pushed forward. It has an automatic shell ejector with a special device by which operator can at will change the gun from an ejector to an extractor by two turns of the screw. By removing one screw that holds the trigger guard in place, the mechanism can be removed for inspection or repair.

No. 140 Hammerless Single Gun.

This firm advise us that their Crack Shot rifle is now chambered for the 22 long rifle cartridge, instead of the 22 short as formerly, thus it will take the 22 long rifle cartridge, 22 long, 22 short and C. B. caps. They are also manufacturing this rifle for the 32 short rim fire cartridges at the same list and the same net price as the 22 rim fire.

They have improved their Favorite rifle by the addition of knurled ring screwed to the barrel next to the frame, which makes an adjustment to take up all wear so that lever can always be made to cam tight.

PENNSYLVANIA DEALERS HOLD ANNUAL MEETING.

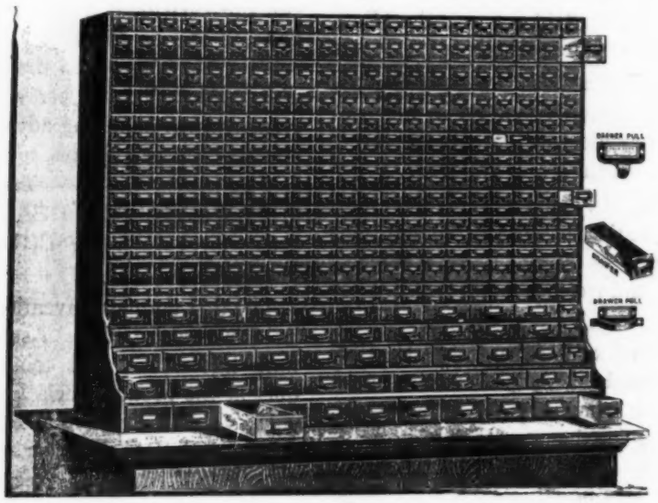
The first annual convention of the Pennsylvania Retail Hardware Dealers' Association was held in Pittsburg last week. The convention closed with a banquet at the Monongahela House. Officers for the ensuing year were elected as follows: G. L. Moore, president, G. J. Rudolph, vice-president; B. A. Maggini, treasurer; J. E. Digby, secretary; Executive Committee, Samuel McKnight, C. J. Kirk, A. M. Gregg.

THE LARGEST CHAIN IN THE WORLD.

From the New York Commercial of March 31 we learn that the Standard Chain Company, Pittsburg, have just completed at their works in Lebanon, Pa., the longest and most powerful chain ever produced. A duplicate is to be made, the two for the Eastern Shipbuilding Company, New London, Conn. They will be used on two great vessels, to ply between San Francisco and ports of Japan. The completed chain is 330 fathoms, and an expert of the British Lloyds Register Association has witnessed the test. When the order was placed it was generally contended that the chain would have to be secured abroad; that the makers here could not supply a chain of the character required. The chain was subjected to the strain of a new 600,000-pound testing machine at the works by the Philadelphia Machine Tool Company, Philadelphia. The tests were made in the presence of W. Gordon Minchin of London, surveyor of the British Lloyds Register. Experts throughout the country and in Europe were waiting for the result of the test. It had been expected that the big chains would have to be secured from a British producer. The big chain is what is known as a cable chain of 3 3-16 stud-link.

RIVERSIDE HARDWARE CABINET.

Farwell, Ozmun, Kirk & Co., St. Paul, Minn., are offering the trade the Riverside hardware cabinet shown in the accompanying cut. This cabinet offers a condensed and simple plan of handling small articles of hardware. The fronts of the drawers are of hardwood, while the sides and bottoms are made of Old Process roofing tin. The mountings and trimmings are of brass and bronze metals.



Riverside Hardware Cabinet.

Blank cards are furnished, which allow the dealer to make such changes in arrangement as may be desired. The No. 1 Riverside hardware cabinet is made of antique oak, highly finished. It contains 433 drawers and is 58 inches high, and 64 inches long. The depth at the top is 12 inches and at the base 20 inches. The stuffing weight is 470 pounds.

NEW YORK DEALERS ARE ORGANIZING.

John R. Taylor, Little Falls, N. Y., is making an effort to organize an association of retail hardware dealers of New York state. Circular letters have been mailed to hardware merchants throughout the state, and it is expected that a meeting will be held soon for organizing an association. The objects of the association, as set forth in Mr. Taylor's circular, are as follows:

First. To ask the manufacturer and the jobber to unite with us for a friendly adjustment of trade differences, on the principle that our interests are mutual.

Second. That all merchandise handled by the hardware trade should be distributed through the local houses, and the profit of the distribution be for the local dealer.

Third. That social intercourse and good fellowship shall be made paramount, so that our neighbors and tradesmen may learn to have confidence in the actions of each other.

Fourth. Regulation of freight and express rates to secure a uniform rate of transportation.

Taylor & Wicecarver, Marble Hills, Mo., hardware dealers, are making important improvements to their building.

WINDOW DISPLAY.

The accompanying cut shows a window display designed by Carroll Fanning of Woodstock, Ill.

The reflection is so very bad in this picture that it is hard to get an idea of the window by the picture. The circle was covered with yellow cheese cloth and on each edge all the way round is a row of natural red oak leaves. The bottom of the window and steps are covered with yellow cheese cloth. The man was painted on cardboard and then cut out, the arms and legs jointed so as to move freely. The stick of wood made a guide for the saw. Bicycle wheels were used for a speed reducer and the motor was a small fan motor. The picture will explain the rest. The bottom of the

A Striking Window Display.

window was covered with small articles used in cutting wood and sharpening tools. Size of window, 6 ft. 3 in. wide by 8 ft. 6 in. high.

SURPRISE CREAM SEPARATOR.

The accompanying cut shows the Surprise cream separator, manufactured by the Seither & Cherry Co., Keokuk, Ia. In these separators the milk is not mixed with the water. This is a strong point in this separator's favor, as it gives the farmer plenty of skimmed milk undiluted with water. These separators are made of the best heavy tin plate and they are very durable. Every separator is guaranteed by the manufacturers.

Surprise Cream Separator.

DEATH OF JOSHUA LAMBERT.

The trade will regret to learn of the death of Joshua Lambert, vice-president of Clayton & Lambert Mfg. Co., Detroit, Mich., which occurred at 6 a. m. March 1, 1902, caused by heart failure. He had been ill for over a year, steadily failing, still his interest in the company's business, which he had helped to build from a small beginning to the largest in its line in the world, daily brought him to the factory, and, though unable to perform his customary duties, up to the last day of his life he gave the company the benefit of his counsel and was deeply interested in all that would advance their interests.

Joshua Lambert, or "Uncle Jay," as he was familiarly called by his many friends and the company's employes, was born in Livonia, Mich., Feb. 14, 1834. He was a kind and loving father and a sympathetic friend whose heart was large enough for all his wide circle of friends, all of whom will mourn his loss. His sunshiny disposition and his anxiety to make life pleasant for others made friends and confidants of all who knew him, particularly the employes of Clayton & Lambert Mfg. Co., and it was touching to see the sympathetic glances which followed him during the last year as, according to his usual custom, he visited the various departments. It will therefore be readily understood that his sudden death was a sad blow to his family and to his many friends. The world can ill afford the loss of such a man as he. He leaves a widow and four children, three sons and one daughter, all of whom reside in Detroit. The three sons being part owners of the company which was organized in 1889 with the following officers: Nelson J. Clayton, president; Joshua Lambert, vice-president; J. E. Lambert, secretary and treasurer, who, together with Charles R. Lambert and Bert Lambert, were directors, all having served the company continuously since it was organized. It will be seen that it was granted to him and his sons to share in the daily work, joys and troubles, each working for the good of all, and this, no doubt, added largely to the success attained. Words are too weak to tell how much he will be missed, but many hearts will mourn his loss.

Wm. T. Hale and J. J. Morris are the incorporators of the Metalware Mfg. Co., Louisville, Ky., capitalized at $20,000.

The Standard Blue Flame Oil Gas Co., Chicago, have been incorporated in Dover, Del., to manufacture heating and cooking stoves.

The Southington Cutlery Co., Southington, Conn., held their annual election March 19 and elected Chas. D. Barnes as president and Justine A. Baldwin as secretary.

BUSINESS CHANGES.

CHANGES.

Benton, Ill.—W. H. Nehl is succeeded by James Metcalf.

Winston, Mo.—Clark & Bates succeed A. L. Mina.

Wyoming, Ia.—A. F. Bell has disposed of his interest in Bell Bros. to Fred DeWitt. The style of the firm will now be Bell & DeWitt.

Napanee, Ind.—G. W. Curtis has disposed of his interest in Curtis & Carpenter to M. M. Hamblin.

Durand, Mich.—C. J. Shaw is succeeded by Ed. Easler.

Kanawha, Ia.—F. A. Newman is succeeded by J. A. and H. H. Honans.

Zionsville, Ind.—Hussey & Hussey are successors to H. S. Anderson.

Richland Center, Wis.—D. G. James & Son have dissolved by mutual consent, O. B. James, the junior member, retiring.

Marshall, Ill.—Robert Mitchell succeeds Shipe & Kohl.

Bushnell, Ill.—Hoover & Voorhees have dissolved. Jas. E. Voorhees continues.

Minerall, Ill.—Carter & Reider have dissolved, R. J. Reider becoming sole proprietor.

Sycamore, Ill.—C. A. Nancolas has disposed of an interest to W. V. Howard.

Howard Lake, Minn.—Jos. Nuwash is succeeded by Herman Volmerding and Aug. Bakeberg.

Hartford, Conn.—North Woodbury, Conn.—N. M. Strong and Mr. Munsell succeed William H. Munson.

Hampton, Ia.—R. E. Train of Olin, Ia., has purchased a half interest in business of A. E. Emerson.

Crookston, Minn.—H. E. Drebold of Hallock succeeds T. G. Thompson.

Weeping Water, Neb.—Mason Bros. of Grand Island succeed Worley & Warner.

Pierce, Neb.—W. H. Hough has sold an interest in his business to Herman Peters and the business will now be known as Hough & Peters.

Lebanon, N. Y.—A. Deusier succeeds Gilbert Clark.

Urbana, Ohio.—The Hardware Supply Co. has disposed of a half interest to William J. Knight.

Lake View, Ia.—C. R. Simmons & Son succeed D. R. Miller & Co. in the hardware, implement and vehicle business.

McKeesport, Pa.—F. S. & W. G. Gleason are succeeded by R. E. Bean of Wilkinburg in the hardware and implement business.

Ludlowville, N. Y.—Wood & Holden and C. A. Campbell are succeeded by W. B. Miller.

Moira, N. Y.—Montross, Martin & Co. succeed W. S. Lawrence & Co

Montpelier, Vt.—J. V. Brooks and C. H. Deming have dissolved. The business will be run in the future as two separate concerns

North Abingdon, Mass.—B. W. Clark has disposed of an interest to Edward Monahan.

Nunda, Ill.—George & Henry Senne succeed Herman Freye.

Hoopeston, Ill.—Oscar Arnold is succeeded by A. L. Spradling.

Bagley, Ia.—J. J. Bagley by E. H. Sprague & Sons.

Winslow, Ill.—W. G. Tyler & Co., fire.

Lisbon, N. D.—Robert S. Sanborn to Billings & Gilbertson.

Delta, Ohio.—Crisman Bros. are succeeded by H. B. Snyder and W. E. Seeley.

Urbano, Ohio.—The Hardware Supply Co. has disposed of a half interest in its store to William J. Knight.

Anchor, Ill.—Collins & Grove are succeeded by J. A. Wadsworth.

Bridgewater, S. D.—T. J. Ryan and James Bowen succeed Mayer Bros.

Chenango Forks, N. Y.—H. F. Strickland is succeeded by Arthur and Fred Palmer.

Dover, Del.—Lord & Hope are succeeded by C. W. Lord & Sons.

Evanston, Ill.—Connor & Arnold have dissolved and the business will hereafter be conducted by Mr. Connor alone.

Hammond, Ill.—J. R. Mitchell has sold his interest to his partner, J. A. Bryson.

Hastings, Minn.—The Johnson & Greiner Co. has dissolved, S. N. Greiner and B. F. Torrance retiring.

Ormsby, Minn.—H. J. Ahrend succeeds R. M. Fonda.

Duluth, Minn.—O. B. Johnson & Co. succeed S. C. Pierce & Co.

Belview, Minn.—G. F. Rahn and A. F. Ellis succeed Pottratz Bros.

Sharon, Minn.—Halverson & Paulson.

Hunter, Minn.—Barber & Gamble are succeeded by Barber, Gamble & Tubbs.

Lakota, Minn.—L. C. Scott & Co. are succeeded by the Scott Mercantile Co.

Westfield, Wis.—Caves & Frank succeed Meinke & Blader.

Cambridge, Ia.—C. R. Rice succeeds J. M. Bartlett.

West Branch, Ia.—Smith & Son succeed Lincoln Buchanan.

Lyons, Ga.—Strange & Oliver are succeeded by the Lyons Hardware Co.

Camden, Ark.—Brown Bros. are succeeded by Marion H. Brown.

Plano, Tex.—Neel Bros. are successors to L. N. Neel.

Bailey, Tex.—Knowles & Moore are succeeded by the Titsworth-Lacy Co.

Sistersville, W. Va.—The Durham Hardware Co. are the successors to the Berry Hardware Co.

Cumby, Tex.—H. J. Howard has disposed of his business to the Cumby Merchandise & Lumber Co.

Thief River Falls, Minn.—Mr. Baily and Mr. Diebold of Hallock succeed G. T. Thompson.

Langford, S. Dak.—J. L. Jarvers succeeds L. H. Skiff & Co.

Oxford, Ohio.—The Stephenson Hardware Co. are succeeded by D. W. Stephenson and F. H. Garrard.

Springport, Mich.—Comstock & Imus are succeeded by Albert Mitchell and Charles Welker.

Bainbridge, Mich.—H. O. Batenau & Co. succeed Grinstead & Lane.

Westville, Mich.—F. P. Herrold is succeeded by Andrew J. Forbes.

Williamsport, Mich.—Broadie & Broadie are the successors of Luppold & Broadie.

Waverly, Minn.—The Waverly Hardware Co. succeed James Nuwash.

Searles, Minn.—Werner & Schneider succeed Werner Bros.

Burtrum, Minn.—Hall & Mertz are succeeded by J. H. Mertz.

Granite Falls, Minn.—E. Cohen is succeeded by Susan Cohen.

Reading, Minn.—Woodworth & Jones will be succeeded by R. J. Jones.

Climax, Minn.—J. A. Fossum is the successor to Smith & Lanager.

New London, Minn.—Wenberg & Peterson are succeeded by Ostlund & Peterson.

Chambersburg, Pa.—Eckel & Brand.

Altoona, Pa.—Chester Smith & Jacob Confer.

Genoa, Neb.—Elm & Wright.

Cleveland, Ohio.—Volmer & Wilfert are succeeded by Fred Volmer.

Roscoe, Zion P. O., Minn.—Waggoner & Jacobs will be succeeded by Frank Waggoner.

Thief River Falls, Minn.—S. V. Bailey and H. E. Diebold of Hallock are the successors of T. G. Thompson.

North Branch, Minn.—Satterstrom & Herreid are the successors of Jno. A. Satterstrom & Co.

Blooming Prairie, Minn.—Charles Bell and T. J. Herron will conduct the business of H. O. Anderson under the firm name of Bell & Herron.

Wyandotte, Minn.—Gartner Bros. have merged their business into a stock company with a capital of $10,000 under the style of the Gartner Hardware Co.

Milford, Neb.—A. J. Welch has disposed of his stock to Wm. Whalen.

Pilger, Neb.—J. G. Tinnery & Bro.

Republican City, Neb.—A. T. Smith has sold his stock of hardware and furniture reserving the undertaking goods, which he will continue to handle.

Ottumwa, Ia.—The Foster Hardware Co. succeed J. H. Parks.

Sparta, Minn.—George Bowers is succeeded by Wm. Gallup.

Albert Lea, Minn.—M. J. Higgins has purchased his partner's interest in the Higgins-Wasgatt hardware store and the business will be known in the future as the Higgins Hardware Co.

NEW FIRMS.

Manlius, N. Y.—J. E. Dabler & Bro.

Richmond, Ind.—J. R. Leab.

Grand Island, Neb.—F. H. Michelson.

Oelwein, Ia.—M. M. Stewart.

Titonka, Ia.—Geo. Westlake

Essex Junction, Vt.—H. N. Gray.

Moulton, Tex.—D. J. Knesek.

Missoula, Mont.—The Missoula Hardware Co.

Deep River, Conn.—H. G. Jones.

Warren, Ill.—Gill Brag.

Alhambra, Ill.—Gehrig & Johnson.

Tyler, Tex.—The James R. Adams Hardware Co.

Orange City, Ia.—Henry Splair.

Ivanhoe, Minn.—O. G. Olson.

Pine River, Minn.—The Linden Hardware Co.

Wabasso, Minn.—Howard Tradewell.

Black Duck, Minn.—L. J. Romdenne and Peter Losso.

Vang, N. Dak.—John Bye.

Brocket, N. Dak.—Vierhus Bros.

York, N. Dak.—The York Hardware Co.

Neche, N. Dak.—W. A. Murphy.

MISCELLANEOUS.

Chickasha, I. T.—Overstreets & Sons; fire.

Lewistown, Pa.—D. F. Kirk burglarized.

Little Falls, Minn.—Ellenbecker & Goulet will enlarge their building, making it 150 feet long.

Seattle, Wash.—The Morse Hardware Co. will construct a fine three-story building 56¼x110 feet.

Eagle Bend, Minn.—William Robinson, fire.

Durango, N. M.—F. R. Graham has added a line of plumbing.

Desmet, S. D.—T. G. Warner will erect a new store.

Bergen, N. Y.—Gleason & Gillette burglarized; loss of about $100.

Pasadena, Cal.—Albert P. Janney will build a hardware store.

McArthur, Ohio.—I. M. Lantz is repairing his store.

Ottawa, Ill.—The Poundstone-Reflor Hardware Co. has erected a new three-story building.

Bangor, Me.—Rice & Miller, fire; loss $5,000.

Goodland, Ind.—C. E. Burgess, fire; loss $25,000.

Heating and Ventilating.

Clarence Joy is a new Albion, Neb., heating man.

Edward Learned is a new Lawrence, Kansas, tinner.

The Herren-Wagner Co. are a new Kenton, Ohio, heating concern.

It is said a new stove foundry will shortly be erected at Moundsville, W. Va.

Lawrence Kling succeeds Kling & Ballou in the heating business at New Haven, Conn.

Oliver Schlemmer is succeeded as a Cincinnati, Ohio, heating contractor by the Oliver Schlemmer Co.

H. A. Dustin succeeds Dustin & Kelley in the plumbing, steam and hot water business at Kewanee, Ill.

King & Richter are succeeded in the plumbing and steam fitting business at Janesville, Wis., by King & Snyder.

Austin H. Catlin, a Peekskill, N. Y., steam fitter, has filed a petition in bankruptcy with liabilities of $10,797 and assets of $1,445.

The Standard Sanitary Mfg. Co., Pittsburg, Pa., have just moved their office from the Standard Building to the Arrott Building.

The J. W. Jordan Co., Worcester, Mass., have been incorporated with a capital stock of $7,000 to carry on the heating and plumbing business.

L. A. Burleigh and Joseph Williamson, Jr., are the incorporators of the F. A. Wendell Heating and Plumbing Co., Augusta, Me., capitalized at $45,000.

C. A. Hight is president and L. L. Hight is treasurer of the Hyde Park Mfg. Co., Portland, Me., capitalized at $200,000 for the manufacture of heating apparatus.

M. A. Thompson, G. L. Craff and Jno. J. Ihms are the incorporators of the M. A. Thompson Co., Ottumwa, Ia., who will carry on a steam heating and plumbing business.

Chas. C. Smith is president, and W. P. Heulin is treasurer of the recently incorporated Peoples' Heating Co., Kittery, Me., capitalized at $20,000, for the manufacture of heating apparatus.

J. L. Brindley, E. L. Chaney and Hiram Thompson are the incorporators of the Thermograde Valve Co., Syracuse, N. Y., capitalized at $10,000 for manufacturing steam valves, traps and heat controllers.

Walter P. Long has been appointed temporary receiver of the assets of Jno. W. Fryer, 141-143 Center street, New York City, the heating contractors, in whose case a creditors' petition in bankruptcy was filed Jan. 16th.

J. B. Jones of the Utica Heater Co., Utica, N. Y., was a recent caller at THE AMERICAN ARTISAN office. In speaking of the outlook for the furnace business Mr. Jones said: "Our present business is very good. We have plenty of orders on hand and the furnace business throughout the country is good. I predict that this fall people will be crying for furnaces. We are experiencing great difficulty in securing iron, although we have contracts for same. In fact, the conditions this year are entirely new, as the leading pig iron and steel firms are sold away ahead. I was talking the other day to a representative of the United States Steel Corporation and he said that they could not promise deliveries of structural steel before August next. If it were not for this company, M. A. Hanna and Rogers, Brown & Co., the present price of pig iron would probably be in the vicinity of $30 per ton. This figure, of course, would ruin our export business, and would act as a damper on the marvelous prosperity the country is at present enjoying."

The United States Register Co., Ltd., Battle Creek, Mich., send us an interesting booklet describing their Jones' side wall register, which is made with a double sheet metal box, the inner and outer casing being separated by means of a cast iron piece with a rounded notch at the top to receive damper or diaphragm. This casting is riveted between the casings, to which the front is attached by means of screws or bolts. At the top is secured by means of bolts a cast plate with vent opening around the ends and rear side. In the center there is left a large opening, with a flange projecting upward, to which the wall pipe fits when used for both floors, or it is fitted with a cap when used for the first floor only. The damper or diaphragm, which rests in the notches at the top of the cast strips between the inner and outer casing, is operated by a worm screw, the handle of which projects through the front, and, being perforated, does not get hot.

The front is of cast iron, the sides and top turn back and fit tight to the plastered wall; the base board butts against this front, making a complete finish.

The back of the register rests against the lath and the front projects to the shoe molding, thereby utilizing six inches of space by fourteen, the space between the studding, without cutting carpets; it will, therefore, be seen that 84 square inches can be secured, where first floor rooms are to be heated.

One of these booklets will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE IDEAL FITTER.

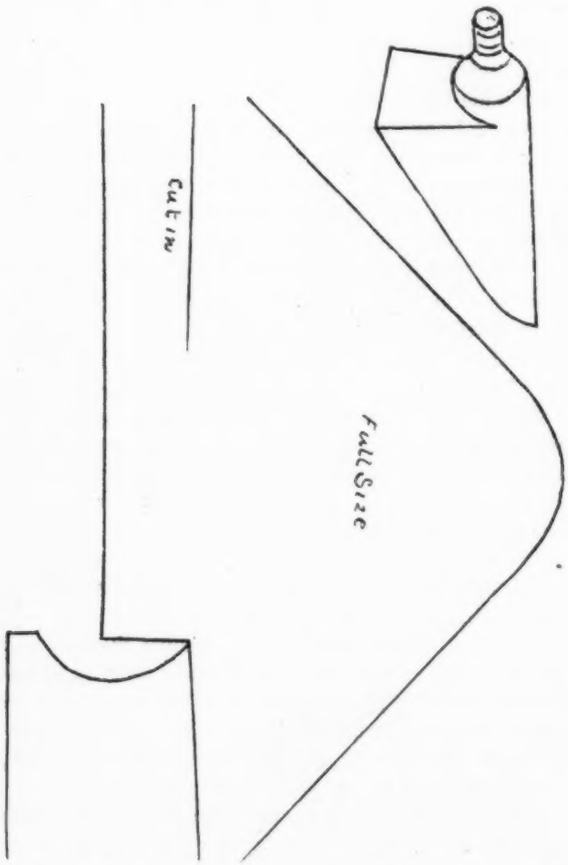
The American Radiator Co., Lake and Dearborn streets, Chicago, send us a very dainty little volume styled "The Ideal Fitter," which shows a great variety of heating goods, including Ideal sectional steam boilers, Ideal Premier steam boilers, Ideal Invincible steam boilers, Ideal portable steam boilers and Ideal Junior steam boilers. Ideal sectional water boilers, Ideal Premier water boilers, Ideal portagle water boilers, Ideal Invincible water boilers, Ideal Junior water boilers and Ideal Premier junior tank heaters, Acme fire box boilers, black steel storage tanks, galvanized steel storage tanks, Ideal automatic expansion tanks, asbestos magnesia molded covering, wool felt covering, Peerless extra heavy screw-stem steel radiator valves, quick-opening steam radiator valves, quick-opening bonnetless hot-water radiator valves, union elbows, Morgan improved vacuum valves, Libra automatic air valves, Ideal hot water thermometers, Ideal altitude gauges, B. & C. floor and ceiling plates, O. S. distributors, Ideal radiator deflecting shields, Ideal bronze and bronzing liquid, Ideal auxiliary water heaters, etc. The trade should write this firm for one of these up-to-date books. When writing them kindly add: "Saw it in THE AMERICAN ARTISAN."

Tinshop.

PATTERN FOR A ONE PIECE CAN SPOUT.

TO THE AMERICAN ARTISAN.

I here give the boys a pattern for a can spot in one



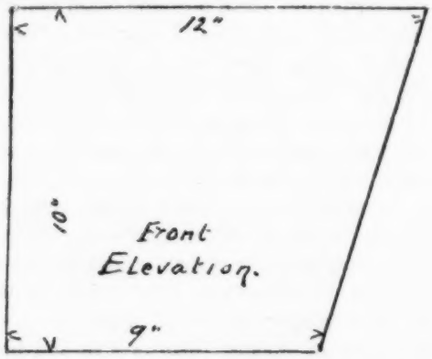
piece which can screw at the end. This is for a pitch top 3 or 3½ inches. "KEEN KUTTER."

Kansas City, Mo., March 29, 1902.

PATTERN WANTED.

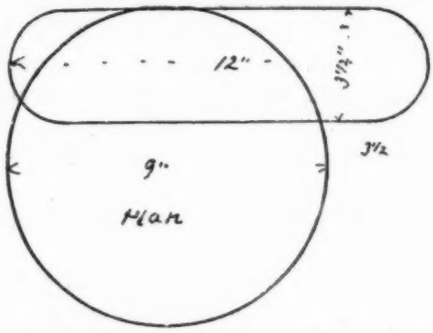
TO THE AMERICAN ARTISAN.

The plan and front elevation give the general views for tapering piece of pipe, one end being perfectly round, while the other is oval. It is to occupy the rela-



tive position as shown by the plan. The height of the pipe when finished is to be exactly 10 inches.

How to develop the pattern for such an article is a question for which I can find no satisfactory answer in any pattern books nor on the market. For this reason I request THE AMERICAN ARTISAN tinshop readers to



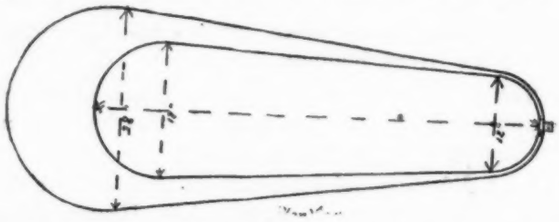
assist me out of my trouble by explaining how these patterns are made. "BADGER."

Madison, Wis., March 30, 1902.

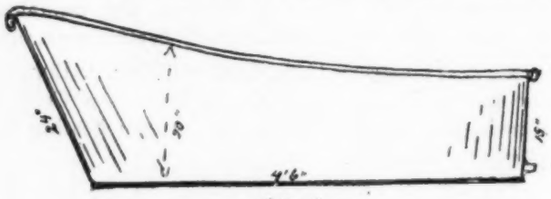
BATH TUB PATTERN.

TO THE AMERICAN ARTISAN.

I have a tub to make somewhat near to the measurements shown by the drawings I send, but do not know



just how to get out the patterns. What I want is a rule or method to get out the patterns, and hints and



Side View.

pointers which any of those who have made tubs of this kind will give me for my benefit. Measurements of different sizes of tubs, how to make the large bead on top of tub, what size material is best suited for the various sizes, etc., are some of the most desirable points I would like some information on.

Unionville, O., March 31, 1902. "B. T. E."

AN ANSWER TO "X. Y. Z."

TO THE AMERICAN ARTISAN.

In looking over THE AMERICAN ARTISAN of March 29, I do not find the information asked for by "X Y Z" of Wis., in reference to his simple water system.

His pressure boiler will furnish the hot water upstairs as well by being placed next to the range as it would if put upstairs.

The supply tank upstairs and not the pressure boiler is what gives the force. If this tank is nearly empty the water would not run into the bath and it would take twelve or eighteen inches more water in the tank to run it into the lavatory. If you could elevate your tank upstairs it would give you much better results. Water will only seek its own level and with the tank

placed as you have it on your diagram you will only get the water to run when the tank is full, but will have no pressure. At the lowest you should have the bottom of the tank as high as the lavatory, and every foot higher you can place your tank, will give you just that much better results. I put in a system of this kind last year for myself, only I put the tank upstairs and have the bath, lavatory and sink on the first floor with the range and pressure boiler. I use a wind mill to pump the water up and have a very satisfactory system.

Sterling, Colo., April 1, 1902.

H. C. MORRISON.

A 1902 ROOFING CONCERN.

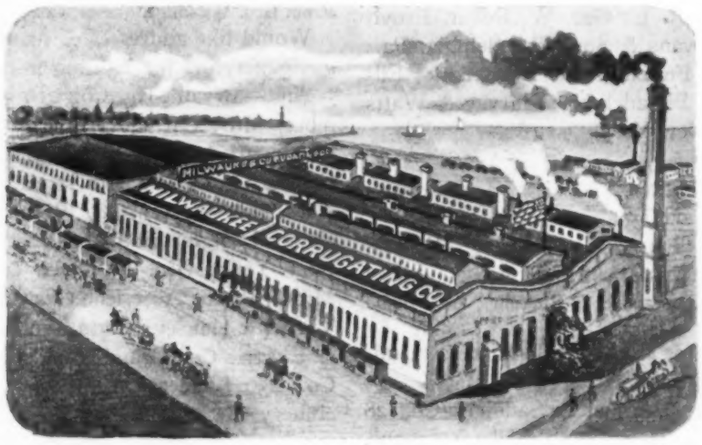
The Milwaukee Corrugating Co., Milwaukee, Wis., are a 1902 roofing concern who are manufacturing roofing, siding, corrugated iron, etc. Louis Kuehn of this concern is one of the best-posted roofing supply men in the country and this new firm starts out with an abundant capitalization, the latest improved machinery and a splendid plant. They occupy nine acres of ground and their principal building is 170x340 feet in dimensions, besides which they have two warehouses 120x250 feet and 100x200 feet in dimensions. An enclosed siding of the Chicago, Milwaukee & St. Paul R. R., which will hold twelve cars, is one of the features of their principal building.

They favor us with their catalogue "A," a handsome 210-page book. Part I of this volume shows an extensive line of eavestrough, conductor pipe, eavestrough hangers, valley hooks, cast iron boots and shoes, ridge coverings, rainwater cut-offs, ventilators, common black steel, galvanized steel, planished iron, sheet zinc, sheet copper, solder, rivets, fire pots, iron crestings, roofing plates, bright plates, coke plates, continuous roofing tin, etc.

Part II is devoted to cornices, letters, gable ornaments, window and door caps, hip caps, galvanized iron castings, artistic cresting blocks, ceilings, metallic cresting blocks and finials, ornamental galvanized ridgings, round ridge roll, finials, galvanized iron skylights, expanded metal lath, ornamental conductor heads, etc.

Part III is devoted to steel roofing, all styles, corrugated iron, corrugated arches, beaded siding and ceiling, weatherboard siding, plain and rock face brick siding, rock face window and door caps, rock face pilasters, continuous rock face stone, iron doors and shutters, Cortright metal shingles, prepared roofing felt, barbed roofing nails and roof paints.

For an initial catalogue this volume deserves deep praise for its comprehensive character. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."



New Roofing Plant.

WANTS A PRIZE COMPETITION.

TO THE AMERICAN ARTISAN.

I wish to say Amen to the idea of W. H. Cunningham and A B C in favor of a prize competition.

Cedar Rapids, Ia., April 1, 1902. "XSELL."

DOES NOT GET INTO WELL.

TO THE AMERICAN ARTISAN.

In reply to "B B," would state that I do not get into the well. "EGYPTIAN."

Cairo, Ill., April 1, 1902.

ANNUAL ELECTION OF METAL EXCHANGE.

The annual election of the New York Metal Exchange was held March 31st, and the following ticket was elected: President, Robert M. Thompson of the Orford Copper Co.; vice-president, Adolph Lewisohn; treasurer, Charles S. Trench of Charles S. Trench & Co. The board of managers are: B. Hochschild, H. H. Hendricks, L. Nachmann, Julius H. Lobdell, Jesse Lewisohn, William Jay Ives, George W. Jaques, and J. H. Lang.

NOTES AND QUERIES.

ROLLING COULTER BLADES.

From V. A. Stookey & Son, Pinckneyville, Ill.

Where can we buy rolling coulter blades?

Ans.—Beaver Falls Steel Works, Beaver Falls, Pa.

FINE SOAP MANUFACTURERS.

From W. A. Lemon, Cincinnati, O.

Would like the addresses of fine soap manufacturers.

Ans.—B. T. Babbitt, 84 Washington street, New York; Jos. Biechele Soap Co., Canton, Ohio; Camden & Philadelphia Soap Co., Camden, N. J.; Colgate

& Co., 53 John street, New York; N. K. Fairbank Co., 277 Dearborn street, Chicago, Ill.; Jas. S. Kirk & Co., 360 N. Water street, Chicago, Ill.; Proctor & Gamble Co., 3d and Walnut streets, Cincinnati, Ohio; Rice Petroleum & Soap Co., Titusville, Pa.

COARSE SALT.

From Ed Scott, Newberry, Ind.

Where can I buy coarse salt?

Ans.—Gedder Coarse Salt Co., Syracuse, N. Y.; Saline Coarse & Fine Salt Co., Syracuse, N. Y.; Wadsworth Salt Co., Wadsworth, O.

DIAMETER OF TANK.

From "Reader," Chicago.

I want to build a round tank 50 inches high to hold 600 gallons. What will its diameter be?

Ans.—As there are 231 cubic inches to a gallon, 600 gallons would require 138,600 cubic inches. As the area of a tank is found by multiplying the height by 3.1416 times the square of the radius, this amount divided by 50 and then by 3.1416, gives 882.35 as the square of the radius. Extracting the square root of 882.35 gives 29.7 as the radius, or 59.4 inches as the required diameter.

UMBRELLA SUPPLIES.

From R. H. Carpenter, Stanley, Wis.

Where can I buy umbrella supplies?

Ans.—M. Friedman & Co., 202 Houston street, New York; American Mfg. Co., 65 Wall street, New York; W. J. Braitsch & Co., Providence, R. I.; Jos. Conoway & Co., 442 N. 12th street, Philadelphia; J. Buggs & Sons Co., Providence, R. I.; Geo. W. Dover, Providence, R. I.; S. W. Evans & Son, Philadelphia, Pa.; Winckler & Son, 142 Fulton street, New York; Ellwood Ivine Tube Co., Philadelphia; Harvey & Watts Co., 275 Canal street, New York.

HODS.

From H. J. Lee, West Point, Neb.

Where can we buy hods?

Ans.—Lansing Wheelbarrow Co., Lansing, Mich.

CHICAGO HARNESS MANUFACTURERS.

From the Griffith Cash Hardware & Plumbing Co., Idaho Falls, Idaho.

Would like the address of wholesale harness manufacturers located in Chicago.

Ans.—The Schumann Leather & Saddlery Co., 28 Franklin street; E. H. Bosler, 2129 Wabash avenue, Chicago, Ill.; R. Hanisch Sons, 194-196 W. Randolph street, Chicago, Ill.; Chicago Harness Co., 327 W. Randolph street, Chicago, Ill.; Chicago Horse Collar Co., 149 Fulton street, Chicago.

PRESSURE GAUGES.

From F. H. Bissell, Dayton, Ohio.

Where can I buy small pressure gauges?

Ans.—American Steam Gauge Co., 36 Chardon street, Boston, Mass.; Ashcroft Mfg. Co., 111 Liberty street, New York; Ashton Valve Co., 271 Franklin street, Boston, Mass.; Cleveland Steam Gauge Co., Cleveland, Ohio; Crosby Steam Gauge and Valve Co., 93 Oliver street, Boston, Mass.; Hohmann & Maurer Mfg. Co., Rochester, N. Y.; James P. Marsh & Co., 224 Washington street, Chicago, Ill.; Schaeffer & Budenberg, 25 Bedford, Brooklyn, N. Y.; Thos. Shaw, 915 Ridge avenue, Philadelphia, Pa.; Star Brass Mfg. Co., 53 Oliver street, Boston, Mass.; B. F. Sturtevant Co., Boston, Mass.; Guiseppe Tagliabue, 302 Pearl street, New York; Nathaniel Tufts Meter Co., 8 Medford street, Boston, Mass.

CHICAGO GLASS HOUSES.

From the Griffith Cash Hardware & Plumbing Co., Idaho Falls, Idaho.

Would like the address of Chicago glass houses?

Ans.—Illinois Glass Co., 212 Randolph street, Chicago; Pittsburg Plate Glass Co., 442 Wabash avenue, Chicago, Ill.; Sprague-Smith Co., 205 Randolph street, Chicago; Tyler & Hippach, 88 Randolph street, Chicago, Ill.; Whitney Glass Works, 70 La Salle street, Chicago, Ill.

PAINT PAPERS.

From F. W. Shearer, Ludington, Mich.

What are some of the leading painter's papers?

Ans.—The Paint, Oil & Drug Review, Chicago; Oil, Paint and Drug Reporter, New York; Painters' Magazine and Coach Painter, New York; Boss Painters' Journal, Xenia, Ohio, and the House Painter and Decorator, Philadelphia, Pa.

ROCKFORD SHELF REST.

From C. I. Kindschi, Milwaukee, Wis.

Who makes the Rockford shelf rest?

(Can any of our readers answer this question?)

AUTOMATIC FEED BOX.

From Hiram Shugars, Pottstown, Pa.

Where can I buy an automatic feed box?

Ans.—Automatic Clock Co., Syracuse, N. Y.

ACETYLENE GAS GENERATORS.

From Geo. Wilson, Florence, Col.:

Would like addresses of manufacturers of acetylene gas generators for lighting purposes?

Ans.—Bryan Mfg. Co., 210 N. Liberty street, Baltimore, Md.; Carbide Arc Light Co., Newark, Ohio; Cincinnati Acetylene Gas Co., Cincinnati, Ohio; J. B. Colt & Co., 3 W. 29th street, New York; McGrane Acetylene Gas Co., 187 Broadway, New York; Mechanical Engineering Construction Co., 63 5th avenue, New York; Geo. F. Owen & Co., Grand Rapids, Mich.; Pacific Acetylene Gas Co., San Francisco, Cal.; Turner & Hauser, Grand Rapids, Mich.; M. B. Wheeler Electric Co., Grand Rapids, Mich.; F. C. Wilson & Co., 239 Lake street, Chicago, Ill.; Manhattan Machinery Co., 109 Liberty street, New York.

ITEMS.

John Brown is a new Mauston (Wis.) tinsmith.

Frank Lewis is erecting a tin shop at Bloomington, Ill.

Parkhurst Bros., are a new firm of Peterboro, N. H., tinsmiths.

On March 27th ground was broken for the new tin plate mill at Greencastle, Ind.

It is rumored that a $15,000,000 steel tube works will be established in Conneaut, O.

The Pueblo Tin Plate Works, Pueblo, Colo., are are actively pushing their plant to completion.

The Pope Tin Plate Co., Steubenville, Ohio., expect to have their twelve-mill plant in operation by June 1st.

R. L. Moncrief, J. A. Schreiber and R. F. O'Shields are the incorporators of the Moncrief Plumbing & Tinning Co., Jacksonville, Fla., capitalized at $10,000

for doing a general plumbing, tinning and roofing business.

The Ashland Steel Co., inc., Ashland, Ky., expect to have their six-mill sheet plant in operation in about a fortnight.

The Jackson Iron and Tin Plate Co., Clarksburg, W. Va., expect to have their plant finished in about five weeks.

A. Dwight Osborn is succeeded in the tinning and plumbing business at Woodstock, Ill., by Osborn & Ercanbrack.

The Executive Committee of the Sheet Metal Workers' International Association of the United States and Canada are holding a meeting at Kansas City, Mo.

Kaminsky & King, Columbus, Ohio, tinners and slaters have settled their difference, and the petition asking that a receiver be appointed for the firm has been withdrawn.

Curtis Wright is president, W. Roogan vice-president and Wm. W. Wright, Jr., is secretary and treasurer of the Arkansas Slate Co., Mount Ida, Ark., capitalized at $250,000.

The workers in the tinware factories at Monterey, Mexico, went on a strike March 20th to secure a weekly pay day, instead of a fortnightly one. Their demands were quickly granted.

E. N. Tolkacz, M. Tolkacz and M. Thiet are the incorporators of the Missouri Sheet Iron Works Co., St. Louis, who have been incorporated with a capital stock of $20,000 for operating a stamping plant.

J. H. Lauterman, 120 N. Tejon street, Colorado Springs, Col., sends us a circular showing his "Non-Swearing" stove pipe, which has an adjustment of twenty inches on a 24-inch joint of pipe.

Theo. Gier, W. H. Wielbye, Fred Sinclair, A. Jones and Wilbur Walker have been appointed a committee by the Oakland, Cal., Merchants' Exchange to secure the location at that point of a steel and tin plate plant.

A new tin plate plant is being erected at Huntington, W. Va. B. W. Foster is president, T. W. Boggers is vice-president, W. H. H. Hoswade is treasurer, and John W. Valentine is secretary of the company interested.

As all the subordinate lodges of the Tin Plate Workers' Protective Association have voted for a continuous scale, harmony is assured in the mills controlled by the Amalgamated Association of Iron, Steel and Tin Plate Workers.

C. B. Grahl, H. H. Grahl, Theo. N. Petersen, Henry L. Schoening, H. D. Petersen, and John Stange are the incorporators of the Grahl-Petersen Co., Omaha. Neb., capitalized at $10,000, for the manufacture of steel roofing, etc.

James E. Fentress is manager, J. A. Jones, Norfolk, is secretary and treasurer, and J. E. Fentress, J. A. Jones, J. T. Wilson, Edward Kibler, and F. C. Miller are directors of The Lamberts' Point Roofing & Plumbing Co., Lamberts' Point, Va.

The roofers and tinners of Coshocton, Ohio, have organized a union with C. J. Voorhees as president, Wilbur Barton as vice-president, E. Felver as treasurer, Harry Lorenzo corresponding secretary, Fred Landerman as financial secretary, and James West, R. M. Elliott and Carl Shrake as board of trustees.

The Galesburg Cornice Works, Galesburg, Ill., advise us that their sales of the Jersey cream separator for the past month have eclipsed all previous records. These separators are built of a good quality of tin and are handsomely enameled and decorated.

The citizens of Worthington, Ind., are striving earnestly to secure a tin plate mill at that point. A committee has been appointed to sell lots in order to raise $60,000 bonus necessary to secure the location of the new tin plate and sheet steel mill, and 150 lots at $200 each have already been sold.

Powers' Bros., Streator, Ill., send us an interesting circular describing the Powers' automatic chimney top, which is made on scientific and mechanical ideas. All bearing is on pivot next to cover, where the weight is. A brace at the bottom prevents cover rubbing stack. Wind blowing past sides of cover (and not through cover), creates a vacuum, thus increasing the draft.

This cover stops rain, smoke and soot from blowing down the chimney. The Powers is the best braced, most durable, and positively most perfect chimney top on the market, it is claimed.

The Canton Steel Roofing Co., Canton, O., are manufacturers of a complete line of conductor pipe, gutters, hangers, crestings, roofing, siding, roof paint, tin plate awnings, iron shutters, stamped metal ceilings, cornice skylights building fronts stamped sheet steel, registers. etc. This firm's metal skylights are so constructed that all condensation is carried to the curb and carried through weep holes on to the roof without soaking between laps. The peculiar construction of the curb on their skylights renders counterflashing unnecessary. The frames are of galvanized iron or copper, with glass of any kind or thickness.

G. L. Gray, 840 North Cedar street, Galesburg, Ill., offers the trade a variety of skylight and elbow patterns. The "Perfect" hip skylight patterns are made on heavy blue print paper, 24x68 inches, and show full size details and sections of skylight. They include 6 in., 8in. and 10 in, ventilator and base patterns, curb patterns, hip bar patterns, rafter bar patterns, jack bar patterns, ridge bar patterns and cap patterns.

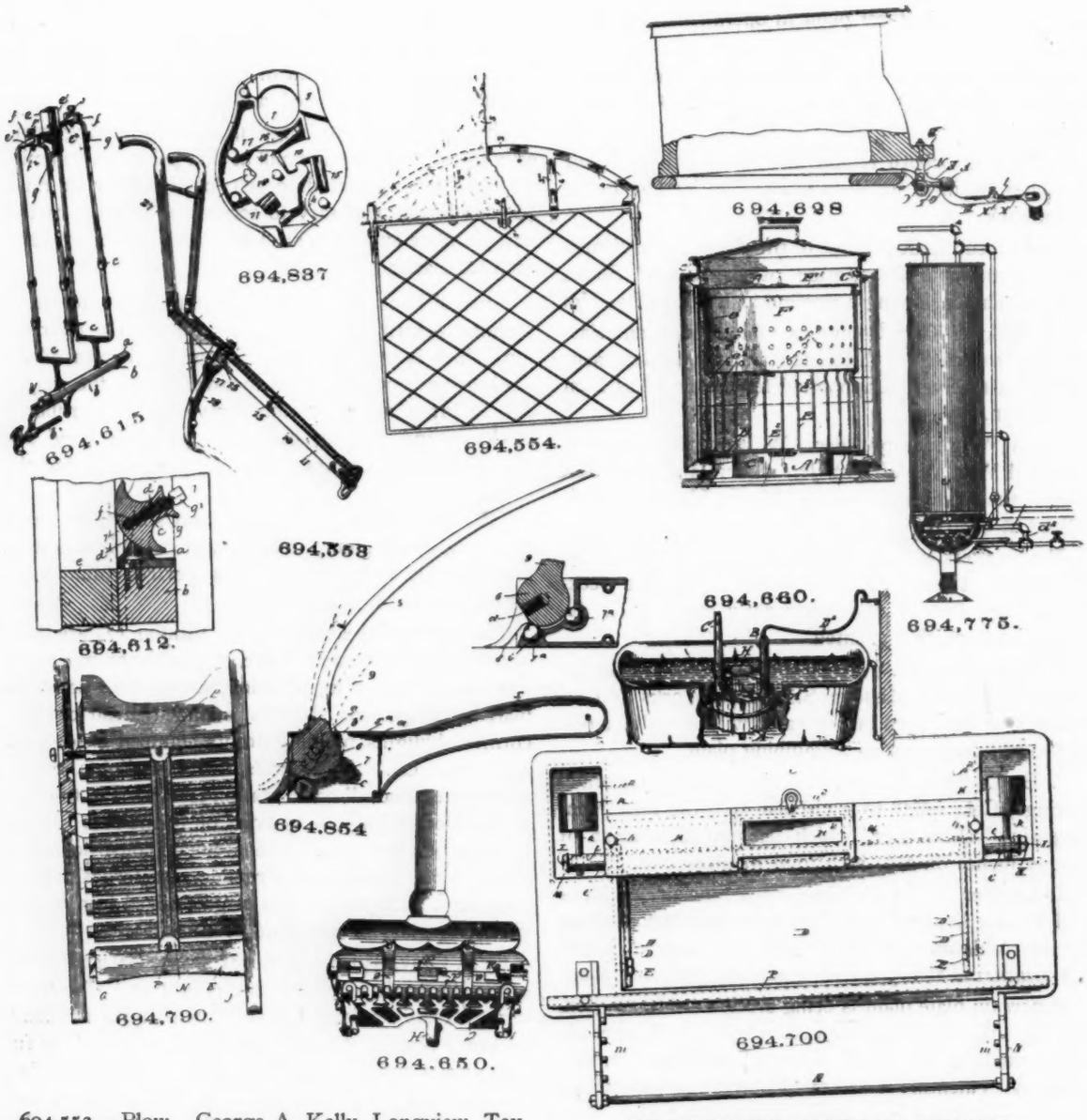
The "Perfect" elbow patterns are made from 1 to 40 inches in two sets. Set A is from 1 to 20 inches made in two, three, four and five pieces. There are 80 complete elbow patterns on blue print paper, 24x68 inches. Set B is from 20 to 40 inches, made in five, six and eight pieces. There are 80 complete elbow patterns on blue print paper.

William O. Runyeon, a Reading, Pa., furnace dealer, has moved from 218 N. 8th street, to 1313 N. 8th street.

Frederick Wahl, Chas. E. Huxley and Thomas L. Jefferson are the incorporators of the Huxley Valve Mfg. Co., Louisville, Ky., capitalized at $15,000.

B. D. Houseworth, C. E. Clark, J. H. Keasley, J. Eberhardt, Jr., J. L. Harmon, D. N. Lieb and H. C. Fidler are the incorporators of the Automatic Heat Regulator Co., Elkhart, Ind., capitalized at $10,000 for manufacturing heat regulators.

NEW PATENTS.



694,553.—Plow. George A. Kelly, Longview, Tex.

694,554.—Door Mat. Charles Kuhn, Fruitvale, Cal.

694,612.—Sash Fastener. William Carrick, Boston, Mass.

694,854.—Tack or Nail Puller. Edward Hanner, Ridgway, Pa.

694,615.—Window Washer. Bernard L. Cohn, New York, N. Y.

694,628.—Hinge for Water Closet Seats. Peter F. Glackin, Pittsburg, Pa.

694,700.—Oven Door. Frank H. Van Houten. Fishkill-on-the-Hudson, N. Y.

694,790.—Washboard. John A. Russell, Key West, Fla.

694,805.—Cooking Boiler. William H. Taylor, Narragansett Pier, R. I.

694,775.—Water-Heating Apparatus. James Murray, Boston, Mass.

694,660.—Water Heater. Edward J. Muller, Brooklyn, N. Y.

694,650.—Safety Razor. Frederick Kampfe, Richard Kampfe and Otto Kampfe, Brooklyn, N. Y.

694,837.—Padlock. Joseph J. Cotter, Bowerston, Ohio.

THE LEADING FORTUNE TELLER.

"That's funny," she said, puzzling over the city directory, "I'm sure that's the name Mr. Kidder gave me, but I can't find it."

"What is it?" asked her friend.

"Why, we were talking about fortune-tellers, and he said the best and surest one in town was named Bradstreet, but I can't find her at all."

THE UPPER DOG.

Jasper—I always sympathize with the upper dog in a fight.

Jumpuppe—You mean the under dog, don't you?

Jasper—No, I don't. Some fool philanthropist is sure to come along and kick in the ribs of the upper dog.

The Tramp—Could you tell me, sir, how I can find work?

Bilyuns—Sure; buy an automobile and try to keep it in running order.—Baltimore Herald.

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Gong Bell Mfg. Co..... 46
Graves Sheet Metal Works..... 9
Harley Burglar Proof Ventilating Sash Lock Co..... 50
Henry & Scheible..... 8
Hess-Snyder Co..... 6
Hoffman, Geo. W..... 48
Huenefeld, E. H..... 53
Illinois Roofing & Supply Co..... 45
Independent Register Co..... 1
Iwan Bros. 47
Johnson, E. J. & Co..... 56
Joliet Stove Works..... 3
Jones, J. H..... 2
Kees, F. D..... 50
Keith Furnace Co..... 10
Kelsey Heating Co..... 2
Kewanee Boiler Co..... 2
Kimball Bros. Elevator Co..... 55
Kruse & Dewenter. 11
La Crosse Steel Roofing & Cor. Co.. 42
Lawrence Mfg. Co 49
Lee, Glass Andreesen Hdw. Co.... 54
Lufkin Rule Co.. 55
Lyons Specialty Co..... 8
McClure & Co..... 56
Mersfelder, W. L..... 44
Meyer Furnace Co..... 12
Michigan Hardware Mfg. Co..... 41
Miller Catalogue Cabinet Co..... 44
Miller Range & Furnace Co..... 6
Milwaukee Corrugating Co..... 41
Monroe Furnace & Foundry Co.... 12
Mueller, L. J. Furnace Co..... 12
National Enameling & Stamping Co..... 47
Nicholson File Co..... 1
Nickel Plate Stove Polish Co..... 44
North Bros. Mfg. Co..... 48
Obermayer, S. Mfg. Co..... 9
Old Dominion Iron & Nail Works 46
Osborn, The J. M. & L. A. Co..... 56
Peck, Hubert 37
Perkins, J. L. & Co..... 1
Peters Cartridge Co..... 54
Philadelphia Lawn Mower Co..... 46
Philadelphia Hardware & Malleable Iron Works..... 8
Phillips, The A. J. Co..... 50
Pittsburg Stove & Range Co..... 13
Plume & Atwood Mfg. Co..... 2
Powers Bros..... 55
Quincy Stove Works..... 7
Richmond Stove Co..... 8
Rippley Hardware Co..... 50
Rogers, S. L. & G. H..... 53
Samson Cordage Works..... 1
Schick, J. K..... 55
Schwab, R. & J. Sons Co..... 13
Seither & Cherry Co..... 49
Smith & Hemenway Co..... 45
Sperry, D. R..... 55
Standard Chain Co..... 50
Stanley Rule & Level Co..... 45
Stevens Arms & Tool Co..... 56
Sun Stove Co..... 8
Sykes Steel Roofing Co..... 40
Tinnerman Steel Range Co..... 7
Tower Mfg. Co..... 48
Twin City Fence & Wire Works. 47
Utica Drop Forge & Tool Co..... 45
Utica Heater Co..... 10
Van, John Range Co..... 5
Van Leyen & Hensler..... 40
Warren, J. D. Mfg. Co..... 49
Weller Pattern Co..... 44
Welling Mfg. Co..... 55
White, Thos. Stove Co..... 4
Willard, Wm. G..... 7
Williams Stove Lining Co..... 45
Willis Mfg. Co. 41
Wood, B. T..... 41
Wynn, Lewis D..... 44
Yawman & Erbe Mfg. Co..... 47

CLASSIFIED LIST.

Architectural Sheet Metal Work.

Berger Mfg. Co,..... 43
Canton Steel Roofing Co..... 42
Friedley & Voshardt..... 43
Michigan Hardware Mfg. Co..... 41
Willis Mfg. Co. 41

Bolt Cases.

American Bolt & Screw Case Co.. 46

Building Paper.

Bradner, Smith & Co..... 41

Card System.

Yawman & Erbe Mfg. Co..... 47

Catalogue Cabinets.

Miller Catalogue Cabinet Co..... 44

Ceilings—Steel.

Berger Mfg. Co..... 43
Burton, W. J. & Co..... 43
Canton Steel Roofing Co..... 42
Eller, J. H. & Co..... 42
Friedley & Voshardt..... 43
Garry Iron Roofing Co..... 40
Illinois Roofing & Supply Co..... 43
La Crosse Steel Roof & Cor. Co.... 42
Michigan Hardware Mfg. Co..... 41

Cement.

Connors, Wm..... 1

Chains.

Standard Chain Co..... 50

Chimney Tops.

Berger Mfg. Co..... 43
Iwan Bros..... 47
La Crosse Steel R. & C. Co..... 42
Powers Bros..... 55
Wood, B. T..... 41

Churns.

Detroit Churn & Separator Co.... 49
A. Geisel Mfg. Co..... 49

Cornices.

Detroit Churn & Separator Co.... 49
Berger Mfg. Co..... 43
Burton, W. J. & Co..... 43
Canton Steel Roofing Co..... 42
Garry Iron & Steel Roofing Co.... 40
La Crosse Roofing Co..... 42
Milwaukee Corrugating Co..... 41

Cornice Ornaments and Statuary.

Friedley & Voshardt..... 43
Willis Mfg. Co..... 41

Cream Separators.

Arras Cream Separator Co..... 49
Detroit Churn & Separator Co.... 49
Galesburg Cornice Works..... 49
Lawrence Mfg. Co..... 49
Seither & Cherry Co..... 49

Cutlery.

Fox Cutlery Co..... 50
Smith & Hemenway Co..... 45

Drills.

North Bros. Mfg. Co..... 48

Eave Troughs.

Berger Bros. Co..... 55
Berger Mfg. Co..... 43
Canton Steel Roofing Co. 42
Clark, Quien & Morse..... 52
Garry Iron & Steel Roofing Co.... 40
Illinois Roofing & Supply Co..... 43
La Crosse Steel Roof & Cor. Co... 42
Welling Mfg. Co..... 55

Elevators.

Kimball Bros..... 55

Enamel Ware.

Cleveland Stamping & Tool Co.... 45
Nat. Enameling & Stamping Co... 47

Faucets.

Clark Novelty Co..... 2

Fencing.

Twin City Fence & Wire Works.. 47

Files.

Barnett, G. & H. Co..... 1
Disston's, Henry Sons..... 48
Nicholson File Co..... 1

Flue Stoppers.

Welling Mfg. Co..... 55
Schick, J. K..... 55

Foundry Supplies.

Obermayer, S. Mfg. Co..... 9

Furnace Cement.

Connors, Wm..... 1

Furnaces—Tinners.

Burgess Soldering Furnace Co.... 46
Clark Novelty Co..... 2
Clayton, Lambert & Co..... 42

Furnaces—Warm Air.

Bergstrom Bros. & Co..... 11
Boynton Furnace Co..... 11
Brand Stove Co..... 7
Detroit Heating & Lighting Co.... 9
Hess-Snyder Co..... 6
Keith Furnace Co..... 10
Kelsey Heating Co..... 2
Meyer Furnace Co... 12
Miller Range & Furnace Co..... 6
Monroe Furnace & Foundry Co... 12
Mueller, L. J. Furnace Co..... 12
Schwab, R. J. & Co..... 13
Utica Heater Co..... 10

Gasolene Stoves.

Sun Stove Co..... 8

Gas or Gasolene Ovens.

Graves Sheet Metal Works..... 9

Hardware Specialties.

Atkins, E. C. & Co..... 56
Atlas Mfg. Co 1
Atlas Bolt & Screw Co..... 1
Blacklock Foundry Co..... 48
Caldwell Mfg. Co.....51-56
Chicago House Wrecking Co..... 51
Iwan Bros..... 47
Lee Glass Andreesen Co..... 54
Lufkin Rule Co..... 55
Nat. Enameling & Stamping Co... 47
North Bros. Mfg. Co..... 48
Plume & Atwood Mfg. Co..... 2
Rippley Hardware Co..... 50
Smith & Hemenway..... 45
Sperry, D. R..... 55
Tower Mfg. Co..... 48

Hay Knives.

Iwan Bros..... 47

Heaters—Hot Water and Steam.

American Radiator Co..... 2
Detroit Heater & Light Co. 9
Kewanee Boiler Co..... 2

Horse-Shoes.

Old Dominion Iron & Nail Works 46

House-Furnishing Goods.

Blacklock Foundry..... 48
Cleveland Stamping & Tool Co.... 45
Enterprise Mfg. Co..... 45
Nat. Enameling & Stamping Co.. 47
Sperry, D. R. & Co..... 55

Knives.

Smith & Hemenway Co..... 45

Lawn Mowers.

Clipper Lawn Mower Co..... 46
Philadelphia Lawn Mower Co..... 46

Lawn Sprinklers.

Smith & Hemenway..... 45

Lamps.

Acorn Brass Works.....40-50

Mail Boxes.

Briscoe Mfg. Co..... 50

Metal Shingles.

Burton, W. J. & Co..... 43
Cortright Metal Roofing Co..... 55
Garry Iron & Steel Roofing Co.... 40
La Crosse Steel Roof & Cor. Co... 42

Metals—Perforated.

Aitchison, The Robert Perf'd Metal Co..... 42

Metallic Shutters.

Berger Mfg. Co..... 43
Burton & W. J. Co..... 43
Canton Steel Roofing Co..... 42
Garry Iron & Steel Roofing Co.... 40
La Crosse Steel Roof & Cor. Co... 42

Mitre Boxes.

Smith & Hemenway Co..... 45

Nails.

Old Dominion Iron & Nail Works 46

Nail Pullers.

Smith & Hemenway Co..... 45

Oil Stoves.

Sun Stove Co..... 8

Ovens.

Geisel, A. Mfg. Co..... 49
Graves Sheet Metal Works 9

Paints.

Buckeye Paint & Varnish Co..... 44
Canton Steel Roofing Co..... 42
Dixon, Jos. Crucible Co..... 38
La Crosse Steel Roofing & Cor. Co. 42

Paper.

Bradner-Smith & Co..... 41

Patents.

Cullen, Orlan Clyde..... 38
Peck, Hubert..... 37

Plyers and Nippers.

Smith & Hemenway Co..... 45

Polish.

Buckeye Paint & Varnish Co..... 44
Hoffman, Geo. W..... 48
Nickel Plate Stove Polish Co..... 44

Post Hole Augers and Diggers.

Iwan Bros..... 47

Radiators.

American Radiator Co..... 2

Razors.

Fox Cutlery Co..... 50
Smith & Hemenway Co..... 45
Utica Drop Forge & Tool Co..... 45

Registers.

Canton Steel Roofing Co..... 42
Fanner Mfg. Co..... 46
Henry & Scheible Co..... 8
Independent Register Co..... 1
Philadelphia Hardware & Malleable Iron Works..... 8

Roofing.

Auld & Conger Co..... 42
Berger Mfg. Co..... 43
Canton Steel Roofing Co 42
Cortright Metal Roofing Co..... 55
Eller, J. H. & Co..... 42
Garry Iron & Steel Co..... 40
Johnson, E. J. & Co..... 56
La Crosse Steel Roofing Co..... 42
Osborn, The J. M. & L. A. Co..... 56
Perkins, J. L. & Co..... 1
Sykes Steel Roofing Co..... 40

Sad Irons.

Blacklock Foundry..... 48

Sash and Spot Cord.

Samson Cordage Works..... 1

Sash Locks.

Harlev Burglar Proof Ventilating Sash Lock Co..... 50

Saws.

Atkins, E. C. & Co..... 56
Disston's, Henry Sons..... 48

Saw Sets.

Disston's, Henry Sons..... 48
Smith & Hemenway Co..... 45

Screen Hinges.

Kees, F. D..... 50

Screw Drivers.

North Bros. Mfg. Co..... 48
Smith & Hemenway Co..... 45

Sealing Wax Strings.

Fouts, C. C..... 46

Shelves and Counters.

Warren, J. D. Mfg. Co..... 49

Skylights.

Burton, W. J. & Co..... 43
Canton Steel Roofing Co..... 42
Friedley & Voshardt..... 43
Garry Iron & Steel Co..... 40
Jones, J. H..... 3
La Crosse Steel Roof & Cor. Co... 42

Sporting Goods.

Peters Cartridge Co..... 54
Stevens, J., Arms & Tool Co..... 56

Silver-Plated Ware.

Rogers, S. L. & G. H..... 53

Sprayers.

Rippley Hardware Co..... 50

Stove Boards.

Michigan Hardware Mfg. Co..... 41

Stove Bolts.

Atlas Bolt & Screw Co..... 1

Stove Castors.

Independent Register Co..... 1
Fanner Mfg. Co..... 46

Stove Lining.

Connors, Wm..... 1
Bridgeport Crucible Co..... 44
Williams Stove Lining Co..... 45

Stove Patterns.

Cope, Geo. W. Pattern Works.... 44
Gobeille Pattern Works..... 44
Mersfelder, W. L..... 44
Weller Pattern Co..... 44

Stove Polish.

Dixon, Jos. Crucible Co..... 38
Nickel Plate Stove Polish Co..... 44
Wynn, Lewis D..... 44

Stove Repairs.

Brauer, A. G..... 44
Dust, Wm. T. Co..... 41

Stoves and Ranges.

Beckwith, Estate of P. D..... 14
Born Steel Range Co..... 5
Brand Stove Co..... 7
Champion Steel Range Co..... 9
Cosby, C. H..... 8
Eclipse Stove Co..... 6
Enterprise Stove Co..... 7
Joliet Stove Works..... 3
Miller Range & Furnace Co..... 6
Pittsburgh Stove & Range Co..... 13
Quincy Stove Works..... 7
Richmond Stove Co..... 8
Tinnerman Steel Range Co..... 7
Van, John Range Co..... 5
White, Thos. Stove Co..... 4
Willard, Wm. G..... 7

Stove Trimmings.

Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Fanner Mfg. Co..... 46

Tacks.

Tower Mfg. Co..... 48

Tape Measures.

Lufkin Rule Co..... 55

Tinners' Tools and Supplies.

Berger Bros. Co..... 55
Bertsch & Co..... 40
Dreis, Andrews & Krump..... 42
Lufkin Rule Co..... 55
Perkins, J. L..... 1
Stanley Rule & Level Co..... 45

Tinplate.

American Tinplate Co..... 41
Illinois Roofing & Supply..... 43
McClure & Co..... 56
Osborn, J. M. & L. A..... 56

Tinware.

Cooney & Geiger..... 56
Nat. Enameling & Stamping Co... 47

Vapor Stoves.

Sun Stove Co..... 8

Ventilators.

Berger Bros. Co..... 55
Berger Mfg. Co..... 42
Burton, W. J. & Co..... 43
Garry Iron & Steel Roofing Co.... 40
Globe Ventilating Co..... 56
Iwan Bros..... 47
La Crosse Steel Roof & Cor. Co... 42
Powers Bros..... 55

Washing Machines.

Brammer, H. F. Mfg. Co..... 52
Clark, Quien & Morse..... 52
Huenefeld, E. H..... 53

Window Screens.

Phillips, The A. J. Co..... 50

Wire Fences.

Denning Fence Works..... 47
Twin City Fence and Wire Works 47

Wringers.

American Wringer Co..... 59

CANADA'S FOREIGN TRADE IN STOVES.

The foreign stove trade of the Dominion is so far only a small one. Taking both exports and imports together, it was only $137,684 in 1901. But it is growing, particularly in regard to exports, which last year were 120 per cent larger than the preceding year. The exports during the past five years were as follows:

EXPORTS OF STOVES.

1897	$3,816
1898	4,660
1899	4,253
1900	3,594
1901	8,908

The countries to which we exported stoves during the past two years and the value sent to each during 1900 and 1901 were as follows:

COUNTRIES TO WHICH EXPORTED.

Great Britain	$ 74	$2,066
Australia	143	156
British West Indies	333	496
Newfoundland	1,019	2,449
Cuba	55	.....
France	218	.....
St. Pierre	857	989
United States	895	2,752
	$3,594	$8,908

The imports of stoves during the past five years were as follows:

IMPORTS OF STOVES.

1897	$ 67,482
1898	88,770
1899	126,944
1900	129,864
1901	128,776

Nearly all the stoves we import came from the United States, as will be seen from a glance at the following table:

COUNTRIES WHENCE IMPORTED.

Great Britain	$ 420	$ 365
Austria	3	.....
France	.....	60
Germany	327	929
Norway and Sweden	.....	394
United States	129,114	127,035
Japan	.....	2
Total	$129,864	$128,776

—Canadian Hardware.

Chas. Beedle is a new Greenville, Ohio, hardware dealer.

Trade Report.

WIRE NAILS.

The prices of wire nails remain unchanged at $2.20 for single carload lots and $2.25 to $2.30 for small lots.

CUT NAILS.

There is a fair demand for cut nails, and prices are slightly higher. Small lots from store are quoted at $2.25.

BARB WIRE.

Prices for barb wire remain unchanged at $2.80 for painted and $3.10 for galvanized barb wire in single carload lots, with 5c extra for small lots.

PLAIN WIRE.

Plain wire is quoted at $2.20 from stock.

BARS.

The demand for this material was extraordinary large during the past week, and it is estimated that the sales aggregated 200,000 tons. After this date iron will sell at 1.95c and steel 1.75c. We quote iron bars, 1.95c Chicago; steel, 1.75c Chicago; out of store, 2c to 2.10c.

SHEETS.

A healthy demand for both black and galvanized sheets is being noted. The shipments from Pittsburg are improving. We quote No. 27 black, mill shipments, 3.15 to 3.20c, Chicago; galvanized, 70 and 10 per cent to 70, 10 and 2½ per cent, plus freight. Out of store, No. 27 black 3.45c to 3.50c, and galvanized, 70 per cent to 70 and 2½ per cent.

STRUCTURAL STEEL.

On account of the heavy demand for material from Chicago stock prices on all shapes and sizes have been advanced 3c and cartage charges. We quote mill shipments, carload lots, as follows: Beams, 15 inches and under, 1.75c; 18 inches and over 1.85c; angles, 6x6 and under, 1.75c; over 6x6, 1.85c; plates, 1.75c; base, tees, 1.80c; zees, 1.75c; lots from store, angles, 3c; minimum; tees, 3c, minimum; beams and channels 3c, minimum.

RAILS AND TRACK SUPPLIES.

The mills being overcrowded with orders for some time to come, but little business has been transacted. Light rails out of store have been advanced in the past week. We quote as follows: Standard rails, $28; light sections, $36 to $38, according to size; out of store, $45 to $50; splice bars, 2c; spikes, 2.30c; track bolts and hexagon nuts, 3.10c to 3.20c; out of store, 3.30c; square nuts, base, 2.85c; out of store, 2.95c.

BILLETS.

There is but little business being done in this line, as the supply is almost entirely cut off. We quote Bessemer billets, $38 a ton; open hearth, $40.

MERCHANT STEEL.

The implement manufacturing trade is still placing heavy contracts and this buying movement will probably continue for several weeks yet. We quote mill shipments, Chicago delivery, as follows: Smooth finished tire steel, 1.95c to 2c; open-hearth spring steel, 2.45c to 2.60c; sleigh shoe, 1.65c to 1.80c, flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.40c to 2.60; machinery steels, 2.15c to 2.25c, base; plow steel, 2.50c and upwards, according to quality; toe calk, 2.25c to 2.35c; out of stock, 2.40c to 2.60c; ordinary tool steel, 6c to 7c; specials, 13c and upwards; less than carload lots, 5 per cent to 10 per cent higher; cold rolled shafting, carload lots, 50 per cent off, Chicago; less than carload lots, 45 per cent off, Chicago.

MASON HAMMERS.

The manufacturers of mason hammers and sorting hammers have adopted an advance price list, as follows: Mason hammers, No. 970, under 3 pounds, 60c per pound; 3 to 5 pounds, 55c per pound; 5 pounds and over, 50c per pound. Mason hammers with teeth, No. 980, under 3 pounds, 65c per pound; 3 to 5 pounds, 60c per pound; 5 pounds and over, 55c per pound. Sorting hammers, No. 990, 1¼ to 2¼ pounds, inclusive, 65c per pound.

WHITE LEAD IN OIL.

White lead in oil, in lots of 500 pounds or over, is quoted at 6c; in lots of less than 500 pounds, 6½c per pound.

LINSEED OIL.

City raw linseed oil is quoted at 63c to 64c per gallon; out-of-town raw, 62c to 63c per gallon.

SPIRITS TURPENTIME.

Southerns, 48½c to 49c; machine made, barrels, 49c to 49½c per gallon.

LARGEST OVEN IN THE WORLD.

The world's largest oven is in a temple in Rajputana in India. At the annual fair, or pilgrimage to the shrine of Kwajah Chisti, in the temple, this oven is filled with rice, butter, almonds and spices, and a gigantic rice pudding is cooked by means of a furnace underneath. Eight pots filled to the brim are set aside for the entertainment of foreign pilgrims, and then certain privileged persons are allowed to empty the oven. To prevent them from being burnt by the scalding pudding they are wrapped from head to foot in thick cloths. When the oven is nearly empty another set of privileged people are allowed to enter, and these all tumble pell-mell together and scrape the cauldron clean of its contents. The origin of this quaint custom cannot now be traced, and though severe burns are the result of the struggle for the pudding no lives are ever lost, which is certainly a miracle, and is regarded as such by the pious Hindus.—Popular Mechanics.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	10x14	$7 50
IX	10x14	9 00
IC	12x12	9 00
IX	12x12	10 50
IC	14x20	7 50
IX	14x20	9 00
IXX	14x20	10 50
IXXX	14x20	12 00
IXXXX	14x20	13 50
IC	20x28	15 00
IX	20x28	18 00
IXX	20x28	21 00

COKE PLATES.

Cokes, 180 lbs	IC	20x28	9 50
Cokes, 200 lbs	IC	20x28	9 80
Cokes, 216 lbs	IC	20x28	10 10
Cokes, 216 lbs	IX	20x28	11 60

PIG IRON.

Lake Sup. Charcoal	$21 00@$22 00
Local Coke Fdy No. 1	19 00@ 19 50
Local Coke Fdy No. 2	18 50@ 19 00
Local Coke Fdy No. 3	17 50@ 18 00
Local Scotch Fdy No. 1	19 00@ 19 50
Local Scotch Fdy No. 2	18 50@ 19 00
Southern Coke No. 1	17 65@ 18 15
Southern Coke No. 2	17 15@ 17 65
Southern Coke No. 3	16 65@ 17 15
Southern Coke No. 4	15 65@ 15 90
Southern No. 1 Soft	17 65@ 18 15
Southern No. 2 Soft	17 15@ 17 65
Southern Gray Forge	15 65@ 15 40
Southern Silveries	17 65@ 18 15
Jackson Co. Silveries	19 00@ 19 60
Ohio Stone Softeners	18 50@ 19 00
Alabama Car Wheel	20 50@ 21 00
Malleable Bessemer	19 00@ 19 50

BLACK SHEET STEEL.

¼ in. 3-16 in. Nos. 8 and 10 per lb.	3 40
No. 12 per lb.	3 45
No. 14 per lb.	3 50
No. 16 per lb.	3 10
No. 18-21 per lb.	3 10
No. 22-24 per lb.	3 20
No. 25-26 per lb.	3 30
No. 27 per lb.	3 40
No. 28 per lb.	3 50

SMOOTH STEEL.

Wood's Smooth Steel, 15-17	3 30
" " " 18	3 40
" " " 20	3 50
" " " 22-24	3 60
" " " 25-26	3 70
" " " 27	3 80
" " " 28	3 90

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

Galvanized Iron 70%

HOOP IRON.

¾x22	¾x20	¾x20
$3 20 100lbs.	$3 00 100lbs.	$2 90 100lbs.
1x20	1¼x19	1½x19
$2 80 100lbs.	$2 75 100lbs.	$2 65 100lbs.

PAINTED CORRUGATED IRON.
8-ft. sheets, 2½x28 Ga. per sq., $2 60

SOLDER.

Guaranteed ½&½ per lb.	18¾c
Commercial ½&½ per lb.	17¾c
No. 1	14c

SHEET ZINC.

600 lb. Casks, base 6½c per lb.

COPPER.

Copper base, 20c

TIN PIGS AND BARS.

Banca, pigs, per lb	28¼@28½c
Straits pigs, per lb	28@28¼c
Straits in bars, per lb	28¾@29c

LEAD.

American Pig	$4 60@4 62½c
	5½@¼c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES—CARPENTER'S.

Hunt's	25%
White's	12½%
Coopers'—Barton's	12½%
White's	12½%
Ship—Barton's	12½%
White's	15%
Hunt's	25%

AMMUNITION.

CAPS, PERCUSSION—per 1000—

F L Waterproof, 1-10s	50c
G D	40c
Eley's	52c

CARTRIDGES.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&5%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal	10&10%
Peters Blank Ctgs. 32 cal	10&10%
Peters B B Caps, Round ball	$1 18
Peters B B Caps, Conical ball	$1 90
U. M. C. Rim Fire Ctgs	50&3%
U. M. C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. Blank Ctgs. 22&32 cal	10%
U. M. C. Blank Ctgs, 38 cal	50-10-10%
U. M. C. B B Caps, Round Ball	$1 75..25&10%
U. M. C. B B Caps, Con. Ball	$2 00 net
U. M. C. Rim Fire Shot Ctgs	50&15&3%
U. M. C. Cent. " " "	25&10&3%

PRIMERS.

Berdan Primers	$1 00
Peters Primers	1 10
U. M. C. Primers	1 08
Winchester Primers	1 08

SHELLS.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&5%
Peters Empty Paper Shells, 16 gauge. League	20&5%
Peters New Victor Nitro Shells	15c
Ideal	33⅓&10%
Peters Loaded Shells. League and Semi-Smokeless	40&5%
Peters New Victor Loaded Shells, with King's Smokeless	40&10&10%
Ideals Loaded with King's Smokeless	40&10&10&5%
U. M. C. New Club, 16 gauge	20&10%
U. M. C. New Club 10&12 gauge	33⅓&5%
U. M. C. New Club	33⅓&5%
U. M. C. Nitro	18%
U. M. C. High Base	18%
U. M. C. Trap	33⅓&10&7%
Winchester Blue Rivals	20%
Winchester Yellow Rivals	20%
Winchester Repeater	18%
Winchester Leader	33⅓&10&7%
U. M. C. Loaded Shells, Black Powder	40&5%
Winchester Loaded Shells, Black Powder	40&5%
U. M. C. Smokeless	40&10&10&5%
Winchester Smokeless	40&10&10&5%

GUN WADS—per 1000.

Peters Gun Wads	30&5%
U. M. C. Gun Wads	30&5%

POWDER.

King's Quickshot Powder; Kegs $4.00; ½ kegs $2.25; ¼ kegs $1.25.
King's Semi-Smokeless 30&5%
King's Smokeless 25, 10&10
Austin Quickshot Powder, Kegs $4.00; ½ kegs $3.25; ¼ kegs $1.25.
Dupont Smokeless, Sporting, 25, 20&10c

SHOT.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 35
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 60
Buck Shot, 25-lb. bags, per bag	1 60
Chilled Shot, 25-lb. bags, per bag	1 60

ANVILS.

Trenton, 70 to 80 lbs	10c per lb
Trenton, 81 to 150 lbs	9c per lb

AUGERS AND BITS.

Snell's Boring Mach., Augers	65&10%
Snell's Car Bits, 12-inch twist	60&5%
Jennings' Pattern Auger Bits	50&10%
Russell Jennings' Augers and Bits	25&10%
Ship Augers, L'Hommedieu	15%
Dalbey Post Hole Augers, doz	$7 00
Irwin Bits	50%
Climax Bits	60&10%

AWLS.

Brad, handled per doz.	$0 30
Brad, shouldered, assorted 1 to 4 per gr.	1 10
Peg, Pat. per gr.	40
Peg, shouldered per gr.	1 10
No 1, Scratch, handled per gr.	4 50
No. 5, Scratch, socket per doz.	1 15

AXES.

Lippincott per doz		$7 25
Mann	"	7 00
Second quality	"	5 75
Beveled axes, add	"	50
Broad—		
Plumb's Canada Pattern		50,10&5%
" Western "		40,10&5%
Hunt's per doz		30
White's	"	12%
Hand—		
Hunt's	"	40
White's	"	12%
Ship—		
White's	"	12%
Single Bit, Gladstone	"	$7 50
Hubbard's S B	"	7 25
Mann's S B	"	7 25
Hunt's S B	"	7 25
Lippincott's S B	"	7 25
Robert Mann's D B	"	9 75
Lippincott's D B	"	9 75

AXLES.

Common iron, long arm, sq. bed	5¼
Common iron, long arm, sq. bed	6¼
Concord express, long arm, steel, square bed	6¾
Coach shape on above, ex. per lb.	½
Short arms on above, extra per lb	2
Welded axles on above, ex. per lb	1½
Half Patent, steel, Nos. 7 to 14	70
Half Patent, steel, Nos. 19 to 22	70
Extra, coach shape, 1¼ & smaller per set	15
Extra, coach shape, 1¼, 1½, per set	30
Extra, coach shape, l'g'r, per set	$1 00
National Wrought Steel Tubular, Self-Oiling—	
Standard Farm (1 to 5) and Special Farm (A1 to A7) less than ten sets	20%
Over ten sets	25

BALE TIES.

Single Crop 80-10&5%

BEAMS—SCALE.

Scale Beams, List Jan. 12, 82	
P. S. & W	40%

BELLOWS.

Blacksmiths'	70&5%
Hand, 8 in. per doz.	$6 85
Molders', 10 in. per doz.	9 00

BELLS.

COW.

Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%

DOOR.

Abbe's Gong	45%
Barton Gong	55%
Home, R & E Mfg. Co.'s	55&10%
Door & Pull, Sargent's	20&10&10%

HAND.

Hand Bells, Polished	60@60&10%
White Metal	55@55&10%
Nickel Plated	50@50&10%
Swiss	50&10%
Silver Chime	33⅓@33⅓&10%

MISCELLANEOUS.

Farm Bells lb.	2¾c
Steel, Alloys, Church and School	50&5%
Wilmot & Hobbs Mfg. Co. Gong	70%

BEVELS.

Stanley's rosewood Handled, T., new list	30%

BLOCKS.

Common Wooden	70%
Eddy Steel Tackle Blocks	66⅔&5%

BOLTS.

CARRIAGE, MACHINE, ETC.

Common, new list	60&5%
Norway Iron, $3.00, list Oct. 7, '84	75&10%
Bolt End, list Jan. 30, '95	50&10%
Machine, list Sept. 20, '99	65&50%

DOOR AND SHUTTER.

Ives' Patent Door	50&10%
Wrought Barrel, Stand'rd list	70&10%
Wrought Flush	40&5%
Wrought Square, Standard list	60, 10&5%

STOVE AND PLOW.

Plow	50&10%
Stove, list December 28, 1899	75&10%

TIRE.

Common, list Dec. 28, '99	75&5%
Eagle Philadelphia	72½%
Norway	75%

BOLTS AND NUTS.

	Discount
Common Carriage Bolts, new list, Feb. 1, 1902	60&5%
Machine Bolts, with H. P. or C. P. Plain Nuts	65@7½%
Machine Bolts, with C. & T. Nuts	60@10%
Machine Bolts, without Nuts	65, 7½@10%
Machine Bolts, Blanks	65@7½%
Bolt Ends, with H. P. or C. P. Plain Nuts	65@10%
Bolt Ends with C. & T. Nuts	65%
G. P. Coach Screws	75@5%
Cone Point Lag Screws	75@5%
Skein Screws	75%
Forge Set Screws and Top Bolts	60%
Plow Bolts and Guard Bolts	60%
Washer Head Coach Screws	70@5%
Wagon Box Strap Bolts	70@10%

BORING MACHINES.

Upright, without Augers $2 75

BOXWOOD RULES.

No. 4	$11 00	New list 60%
" 12	16 00	
" 18	6 00	
" 26	11 00	
" 27	13 00	
" 29	4 50	
" 66	10 00	
" 66½	10 00	
" 67	6 00	
Boxwood, new list		
Ivory		35@5%
Lufkin's Steel		30%

BRACES.

Barber's	60@10%
Common Ball, American	$1 35@1 45
Fray's Genuine Spofford's	50@10%
Fray's No. 508 to 522	50@10%

BRACKETS.

Cast Iron Plain	50&10
Wrought Steel	70&10@75%
Bradley's	75@75&10%

BROILERS.

Wire 70&10%

BUTTS.

Bright Butts, Nos. 800, 802, 804, 806, 808, 810, 814, 816, 818, 820, 854	60@25%
Bright Butts, Nos. 826, 828, 829, 830, 832, 834, 836, 838, 840, 842, 843, 844, 845, 846, 848	60@25%
Bright Butts, Nos. 822, 822½, 823, 823½	75&10%
Japanned Butts, Nos. 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 726, 727, 728, 729, 730, 731	70%

CAGES—BIRD.

Enameled	50&10%
Brass	50&5%

CASTERS.

Bed	70&
Plate Casters	65&5
Martin's Patent (Phoenix)	1

CHAIN.

American Coil Chain, Less than Cask lots:

3-16	¼	5-16	⅜	7-16	½	⅝
9.50	7.00	5.65	4.50	4.35	4.25	4.10

¾ 4.00c per lb.
Less than cask lots add 25c.

German Coil, list July 24, '97	60&10&5%
German Halter Chain, list July 24, '98	60&10&5%

Traces, Western Standard: 100 pair

6½—6-2, Straight, with Ring	29 00
6½—8-2, Straight, with Ring	33 00
6½—10-2, Straight, with Ring	36 00

Add 2c per pair for Hooks.
Twist Traces 2c. per pair higher than Straight Link.

Trace, Wagon and Fancy Chains Eastern list	50&10%
Jack Chain, list July 10, '93	
Iron	50@10&5%
Brass	50@10&5%

Safety Chain.....60@10%
Gal. Pump Chain.....lb. 4¼@4½c
Covert Sad. Works:
Breast, Hitching and Rein Chains.....70%
Covert Mfg. Co.:
Breast.....35@2%
Halter.....35@2%
Heel.....35@2%
Rein.....35@2%
Stallion.....35@2%
Oneida Community:
Eureka Coil and Halter.....40@5%
Niagara Coil and Halters....40@5%
Niagara Cow Ties..45@5&45@10&5%
Am. Coil and Halters..40% new list
Am. Cow Ties.....35@5&40@5%
Wire Goods Co.:
Dog Chain.....60@10%
Universal Dbl-Jointed Chain...50%

CARPENTERS' CHALK.

Blue.....per gross, 60
Red..... " 55
White..... " 50
Common White School Crayon..... " 10

CHALK LINES.

In 20-Ft. Hanks:
No. 12, Twisted.....per doz., $0 22
No. 1, Braided..... " 24

CHISELS.

Mix..... } 70&10%
Witherby..... }

CHISELS—BOX.

Inches	10	12	14
Round.....per doz.	$2.10	$2.25	$2.75
Flat.....per doz.	2.85	3.60	4.20

CLAMPS.

No. 25 Adjustable.....50&10 to 60%
Carriage Makers.....60%
Hammer & Co.'s Malleable Iron, Patent Adjustable.....20&15%
Hammer & Co's Malleable Iron, Heavy Pattern Screw.....40&15%
Hammer & Co.'s Malleable Iron, extra heavy.....40&15%

CLEANERS.

Pot, Wire.....per doz. $0 45

CLEVISES.

Malleable.....per lb. 4¼c

CLEAVERS.

Beatty's.....dis 40
White's.....dis 15

AJAX FAMILY CLEAVERS.

	6in.	7in	8in
Per dozen.....	$5.50	$5.75	$6.25

CLIPPERS.

E. H. Hotchkiss Horse Clippers
No. 10.....per doz. $18 00
No. 30..... " 15 60
No. 22..... " 13 80
No. 20..... " 13 20
No. 8..... " 10 80
H. Hotchkiss Toilet Clippers
No. 1.....per doz. 9 60
No. 101..... " 10 80
No. 2-3..... " 10 80
No. 300..... " 13 20
No. 500..... " 15 00

CLOTHES LINES—ROPE.

60 ft. Jute.....per doz. $0 90
72 ft. Jute..... " 1 00
60 ft. Sisal..... " 1 50
72 ft. Sisal..... " 2 00
60 ft Cotton..... " 1 25
50 ft Braided Cotton..... " 84

CLOTHES WRINGERS,

SEE WRINGERS.

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

CORKSCREWS.

Howes.....25&22%
Humason & Beckley.....40&10%
Empire..... 40%
Walker's..... net
Williamson's Regular..... 35%
Williamson's Forged Worm.. 35%

DOG COLLARS.

Pope & Stevens' List:
Brass (full assortment)....net price

DOOR CHECKS.

Blount.....30%
Eclipse.....30%
Corbin.....3 %
Blum.....per doz. $6 50

DOOR HANGERS—BARN.

No. 3. Superb.....per doz. sets, $6 50
No. 4. Superb..... " " 7 75
Single Flange, D. B. Rail, ...per 100 ft. 1 60

DRILLS AND DRILL STOCK.

Common Blacksmith's Drill, ...$1 50@$1 60
Bench Drills, Stearns .... 5 50& 6 00
Blacksmith's Self-feeding, each, ... $5 00&$7 00
Breast, Miller's Falls, ... per doz. $25.00 net for No. 12
Godell Automatic Drills. $9 50to$22 00

DRILLS—BIT STOCK.

Standard List.....60&5%@60%@10%

DRILLS—TWIST.

Standard List.....60@60&5%
Straightened taper shanks to 1⅛in.

DRIVEN WELL POINTS.

Driven Well Points.....75&10&5%

EAVE TROUGHS.

Galvanized Eave Trough and conductor pipe; 75-10-7.....⅓%

EGG BEATERS.

Standard Co.:
No. 10 Cast Handle Dover pr gr $4 50
Dover Pattern.....per doz. 70
Mammoth Dover..... " 1 75
Genuine Dover..... " 90
No. 15 Extra Heavy Steel Handle.....per gr 21 00
Rival..... " 10 00
Taplin Mfg Co.:
No. 50 Small Family size pr gr 7 00
No. 100 Regular Fam size pr gr 7 50
No. 102 Regular Family size tinned.....pr gr 9 00
No. 150 Large Fam size pr gr 21 00
No. 150 Large Fam size tinned.....pr gr 24 00
Lyons Standard size....per doz 1 75
Surprise.....per gr 1 40
Wonder (S. S. & Co.).....pr gr 7 50

ENAMELED STEEL WARE.

Royal (N. E. & S. Co.)....70 to 70&10%
Peerless (L. & G. Mfg Co.)...70&10%
Agate Nickel Steel Ware.....50&20%
Pearl Agate Ware.....50&20%
Blue and White Ware.....60&10%
All White Ware (with blue border).....50&10&5%
Regal Steel Ware.....60&10%

FASTENERS, BLIND.

Zimmerman's.....50&10%

FAUCETS.

Standard Metal Key.....25%
B. & L. B. Co
Redlich's Wood Faucets.
Red Cedar..... }
Oak..... }
Cherry..... } Net Prices.
Cork Lined..... }
Metal Key..... }
Self Measuring:
Enterprise, per doz $36 00.....40%
Corked Lined.....70&5@70&10&5%
Metallic Key, Leather Lined .....70@70&10%
Red Cedar.....50@50&5%
B. & L. B. Co.
West's Lock, Open and Shut Key.....50&10%
John Sommer's Peerless Tin Key. 40%
" " Boss Tin Key.....50%
" " Victor Metal Key 50&10%
" " Duplex Metal Key...60%
" " Diamond Lock.....40%
" " I X L Cork lined.....50%
" " Reliable " ..50&10%
" " Common " 70%
" " Chicago " 60%
" " O K " 50%
" " Perfection Cedar.....40%
Star.....60@60&5%
Star, Metal Plug new list..40@40&5%
Lockport Metal Plug, reduced list.....60&5%
McKenna Brass:
Burglar Proof, N. P.....35%
Improved, ¾ and ⅞in.....35%
Self Measuring:
Enterprise, per doz $36 00.....40%
Lane's, per doz $36 00.....40&10%
National Measuring, per doz $36 00.....40%

FILES AND RASPS

Great Western.....75&5%
J. B. Smith.....75&5%
Arcade.....75&5%
K. & F.....75&5%
American.....75&5%
McClellan.....75&5%
Eagle.....70,10&5%
Nicholson.....70&10%
Royal.....80@80&10%
Black Diamond.....70&10%
Disston's.....75&5%

FILE HANDLES.

Nicholson File Co.'s "Simplicity" File Handles...per gr $0.85 to $1 50

FORKS AND HOES.

Coke and Cottonseed Forks....40&5%
Coal Forks.....40&10%
Barn or Ice Forks.....40&5%
Beet Forks.....30&10
Ballast or Stone Forks.....40&5%
Tanners' Forks.....40&5%
Shaving Forks.....40&5%
Potato Scoop Forks.....40%
Oyster Forks.....40&5%
Sluice Forks.....40&5%
Heavy Mill, Manure or Street Forks.....70%
Steel Tar or Asphalt Rakes.....65%
Asphalt Hoes.....65%
Two Tine Hay Forks, Std. Size. 65&10%
3 Tine Hay Forks, Std. Size. 70&5&10%
4 Tine Hay Forks, Std. Size. 66⅔@10%
Socket Four Tine Hay Forks. 66⅔&5%
Socket Four Tine Manure Forks. 70%
Socket Four Tine Spading Forks .....70&5&5&2½%
Three Tine Hay Header and Baler Forks.....67½&2½%
Four Tine Hay Header and Baler Forks.....63⅓%
Grain or Barley Forks.....70&10&10%
Four Tine Manure Forks...70&10&5%
Five & Six Tine Manure Forks .....70,10&5%
Spading Forks.....70&10&5%
Potato Digging Forks.....65%
Stone Picking Forks.....65%
Garden Hoes.....75&10&5%
Meadow and R. I. Hoes....75&5&2½%
Sunbeam Meadow Hoes.....75&5&½%
Mortar and Street Hoes....75&10&5%
Planter Hoes, Regular Pattern .....70&30%
Tobacco Hoes.....75&20%
Cotton Hoes.....70&10&10&5&2%
Rough Fin, Shank Cot. Hoes. 75&12½%
Cotton Chopper Hoes.....75&10&7½%
Ladies' Cotton Hoes.....75&10&7½%
Malleable Rakes.....75%
Toy Ladies' and Boys' Hoes.....70&10to70&10&5%
Weeding Hoes and Rakes.....75&5%
Potato Hooks.....70&5%
Hop Hooks.....60&10&2¾%
Steel Garden Rakes.....75%
Steel Garden Rakes Stamped blank.....70%
Turf Edgers.....6 &5%
Steel Road Rakes.....65%
Special Mortar Hoes.....40&10&2½%
Harpers' No. 7 Mortar Hoes.....60%
Truck Hoes.....50&10&2%
Hoes.....65%
Special Hoes.....75&10&2%
Hoe Down Hooks.....75&10&2%
Warren Hoes.....60&5%
Laid Steel Edge Hoes.....25, 5&2%

GAUGES.

Marking, Mortise, etc....50% new list
Stanley R. & L. Co.'s Butt & Rabbet Gauge.....Net
S. & H. Cos.....75%

GIMLETS.

Gimlets.....60%

GLASS CUTTERS.

Woodward.....33⅓&10%
Red Devil.....per doz. $2 25
Barney V. & T. Co.....40&10%

GLUE POTS.

Tinned.....25%
Enameled.....35%

GLUE.

Eagle, Liquid.....40%
LePage's, Liquid—
List "A".....37½%
List "B".....33⅓%
List "C".....25%
B Amber, bulk.....per lb 9¾c
A White, bulk.....per lb 12½c
H. S. Amber, bulk.....per lb 17c

GREASE, AXLE.

Fraser's.....$9 50 gr
Baum's Castorine.....Net

GRINDSTONES.

Schofield's Bi-Treadle Grindstones.....each, $3 10
Schofield's "Auto"..... " 3 35

GRINDSTONE FIXTURES.

Stowell's.....Net
Reading Hardware Co.....Net

HAMMERS.

F. R. Plumb's A. E. Nail.....40&10%
Bell Face.....40&10%
Brad.....40&5%
Farriers.....40&5%
Shoe.....30&5%
Riveting.....40&5%
Blacksmith's.....50&10%
Prospecting.....50&10%
Calumet Nail.....per doz., $3 40
Engineer's.....50&10%
Machinist's Ball Pein.....50&10%
S. & H. Cos. No. 20.... per gross. 5 25

HANDLES—IRON, WROUGHT OR CAST—DOOR OR THUMB.

No. 0.....per doz $0 90 } Dis. 50
No. 1..... " 1 00 }
No. 2..... " 1 18 }
No. 3..... " 1 35 }
No. 4..... " 1 50 }
Bronze iron drop lat., per doz net $1 10
Japanned store door.....net 1 10
Barn door No. 5..... " 1 35
Chest and lift.....dis 50

Wood—

Saw and plane.....dis 40&10%
Hammer, hatchet, axe, etc. " 40&10%
Brad awl.....per gro. 2 25
Hickory firmer chisel ..... }
Apple firmer chisel ..... }
Socket firmer chisel ..... } ..25
Socket framing chisel ..... }
File.....per gro. $1 60
Auger, assorted..... " 4 50
Hoe, rake, fork, etc.....50%

Cross Cut Saw—

Atkins' No. 1.....per pair 24c
" No. 3..... " 18c
" No. 6..... " 11c
Climax..... " 11c
Common loop..... " 10c

HANGERS.

Hangers.....60%

HATCHETS.

American Axe and Tool Co..... }
Blood's..... }
Hunt's..... }
Hurd's..... } 40&10% to 40&10 &5%
Mann's..... }
Underhill's..... }
C. Hammond & Son.. }
Fayette R. Plumb... }

HAY AND STRAW KNIVES.

Lightning.....$5 50
Lightning Patterns..... 5 25

HINGES.

BLIND AND SHUTTER.

Surface Gravity Locking Blind: (Victor; National; 1868 O.P.; Niagara; Clark's O. P.; Clark's Tip; Bunalo).

No.....	1	3	5
Doz pair.....	$0 75	1 70	3 40

Mortise Shutter: (L. & P., O. S., Dixie, &c.)

No.....	1	1½	2	2½
Doz. pair.....	$0 60	55	52	45

Mortise Reversible Shutter, (Buffalo &c.)

No.....	1	1½	2
Doz. pair.....	$0 65	60	55

Parker.....70
North's Automatic Blind Fixtures. No. 2, for Wood $9 00; No. 3, for Brick $11 50.....10%
Reading's Gravity.....75&10%
Sargent's, No. 1, 3, 5.....66⅔&10%
Sargent's No. 11 & 13.....70&10%
Wrightsville H'dware Co.:
O. S., Lull & Porter.....75%
Acme, Lull & Porter.....75&10
Queen City Reversible.....70&10%
Stenger's Positive Locking, Nos. 1 & 3.....7 &10&5%
Shepard's Noiseless, Nos. 60, 65, 55 70&10%
Niagara, Gravity Locking, Nos. 1, 3 & 5.....75&7½%
1868, Old Pat'n. Nos. 1, 3 & 5 75&7½%
Tip Pat'n, Nos. 1, 3 & 5.....75&7½%
Buff. Gravity Lock., 1, 3, 5 75&7½%
Shepard's Double Locking, Nos. 20 & 25.....70&10%
Champion Gravity Locking, No. 75 75&7½%
Steamboat Gravity Locking, No 10 5&7½%
Pioneer, Nos. 060, 45 & 5½..75&7½%
Empire, Nos. 101 & 103.....70&7½%
W. H. Co's Mortise Gravity Locking No. 2.....80&10%
Stanley's Steel Gravity Blind Hinges.....per doz. sets 80c Net

GATE.

Clark's or Shepard's—Doz. sets:

No.....	1	2
Hinges with Latches.....	$2 10	$2 35

Hinges only.....$1 60 $1 80 $2 90
Latches only..... 60 70 95
New England:
With Latch.....doz..@$1 55
Without Latch.....doz..@$1 25
Reversible Self-Closing:
With Latch.....doz..@$1 80
Without Latch.....doz..@$1 45
Western:
With Latch.....doz.$1 40@$1 75
Without Latch.....doz.$0 95@$1 30
Wrightsville H'dware Co.:
Shepard's or Clark's Nos. 1 & 2, 65&2½%
Shepard's or Clark's No. 3.....55&5%

SPRING.

Holdback, Cast Iron.....per gr $9 00
Non-Holdback, Cast Iron " 8 00
J. Bardsley:
Bardsley's Patent Checking....15%
Bommer Bros.:
Bommer Spring Hinges.....40%
Bommer Ball Bear Floor Hing's40%
Chicago Spring Butt Co.:
Chicago.....20%
Floor Hinge.....40%
Garden City Engine House.....20%
Keene's Saloon Door.....20%
Triple End.....40%
Hoffman Hinge & Foundry Co.:
No 70 & 80 Holdback Detachable $9 00
Lawson Mfg. Co.:
Matchless.....20%
Matchless Pivot.....35%
Payson Mfg. Co.:
Oblique.....50&10%
Stover Mfg. Co.:
Ideal No. 16, Detachable, per gr.....$12 50
Clover Leaf, No. 7.....per gr 8 75
New Ideal, No. 1..... " 8 75
New Ideal, Double Act'g " 11 00

WROUGHT IRON.

Strap and T Hinges, list Mar. 15, 1901:
Light Strap Hinges.....70&20%
Heavy Strap Hinges.....75&10&20
Light T Hinges .....66⅔& 20%
Heavy T Hinges.....60&5&20%
Extra heavy Hinges .....75&20%
Hinge Hasps.....60&10&5%
Cor. Heavy Strap.....75&10&20%
Cor. Ex Heavy T .....75&20%
Screw Hook and Strap:
6 to 12in.....lb. 3½c
14 to 20in.....lb. 3¼c
22 to 36in.....lb. 3 c
Screw Hook and Eye:
¾ to 1in.....lb. 6½c
⅝in.....lb. 7½c
½in .....lb. 9½c

MISCELLANEOUS.

Hoffman's Steel Spring Butt Hinges, ...40&10%
Hoffman's Offset Refrigerator Hinges.....40&10%

HOLLOWARE.

Stove Holloware Ground.....50&10%
Maslin Kettles.....70&10%

HOOKS.

Picture, No. 299.....&20c
Bush, common axe handle.....$7 00
Bush No. 1, Underhill..... 9 00
Bird Cage.....40%
Clothes Line.....60&10&10%
Grapling 50%
Ceiling .....60&5%
Coat and Hat.....60&5%
Harness.....60&1 &10%
Cotton, V. & B.....25%
Tassel and Picture.....50%
Wire, Coat and Hat, Gem.....net
Indestructible.....45%
Brass.....$2 00%
Hooks and Eyes, bright wire.....85%
Brass .....60&10&5%
Fish Hooks, American.....50%

HOSE—RUBBER.

Competition.....dis 70&10%
Standard.....70%
Extra.....60%
N. Y. Rubber Co.'s st'd.....50&10%
Banner.....6 %
Extra.....50%

IRONS—SAD AND POLISHING.

Mrs. Pott's No. 50 .....65c
Mrs. Potts' No. 55.....70c
Mrs. Potts' No. 60.....90c
Mrs. Potts' No. 65.....85c

KETTLES.

Maslin 66⅔%

KNIVES, DRAWING.

Braces, Peck's Adjustable P. S. & W.
8in.....per doz $15 00
10in ..... " 16 75
12in ..... " 18 00
Standard List.....70&5%
Adjustable Handle.....20%
Watrus.....30&10@40%
Cantelo's Folding.....25%
Improved Crown.....20%

KNOBS.

Base, 2¼in. Maple, Rubber tip per gr.....$1 60
Door, Mineral.....per doz 70c
Door, per. Jap'd..... " 75c

LADLES.

Reading.....Net
Sargent's .....Net

LAMPS—HAND.

Hammer & Co.'s Malleable Iron..40%

LANTERNS—TUBULAR.

No. 0 Berger's "Bail Lift." per doz $9 50.....40&10&5%
No. 0 Berger's "Bail Lift," Galvanized, doz $10 50.....40&10&5c
No. 2 Berger's "Bail Lift," per doz $13 00.....40&10&5c
No. 2 Berger's "Cold Blast," per doz $16 00.....40&10&5c
No. 0 Berger's Dash Board, Japanned, Plain Globe, per doz, $13 00.....40&10&5%
No. 0 Berger's Dash Board, Japanned, Bull's Eye, per doz, $13 50 .....40&10&5%
No. 2 Berger's Dash Board Japanned, Plain Globe, per doz, $17 00.....40&10&5%
No. 3 Berger's Dash Board, Japanned, Bull's Eye, per doz, $17 50.....40&10&5%

BULL'S EYE POLICE.

3in Flash Light.....per doz $6 00
4¾in Regular..... " 3 50
3in Regular..... " 4 20

LEMON SQUEEZERS.

Wood, Common.....per doz 72c
Wood, Porcelain Lined.... " $1 30
Boss Tinned Iron..... " 80
Iron, Porcelain Lined..... " 1 85
Jenning's Star..... " 1 75
King..... " 2 25

LOCKS.

Plate.....33⅓%
Slaymaker-Barry Co.....30&35%
Sargent & Co. .....40,40&10%
Yale Flat Key.....Net
L. & C. Round Key.....30&10%
Reading Harding Co.....40%
L. & C. Flat Key Latches.....33&10%
Stearn's Sliding Door.....Net $15 00

CABINET.

Eagle 33⅓%
Yale.....33⅓%
Eagle and Corbin Trunk.....25%

PADLOCKS.

Wilcock's.....70%
M. W. & Co.....70%
Russell & Irwin.....70%
Slaymaker Barry Co.....40%
Bohannon's Brass.....30%
Yale.....Net
Eagle.....33⅓%
Eureka, Eagle Lock Co.....40%
Corbin .....33⅓&10%

MALLETS.

Fiber Head Sterns.....30%
Hickory.....40%
Lignumvitæ.....40%
Tinners' Hickory and Applewood, per doz.....75@$1 50

MALLETS—Fibre Head.

	Small	Medium	Large
Per doz.....	$5 00	$5 75	$6 75

MAULS—WOOD CHOPPERS.

Lake Superior & Oregon Pattern, 75%

MATTOCKS.

Regular List.....70%

MEAT CHOPPERS—HALE'S.

	11in	12in	13in
Per doz.....	$9 25	$11 50	$15 75

UNIVERSAL MEAT CHOPPERS.

	No. 1	No. 2	No. 3
Per doz.....	$10 75	$13 00	$18 00

No. 100 Enterprise Food Choppers.....per doz $9 75
No. 25 Ideal Meat Choppers, per doz..... 9 25

MOWERS, LAWN.

Cheap.....all sizes $2 25
Good.....all sizes $2.50@$2 75

	10	12	14	16in
High Grade.....	$4 25	$4 50	$4 75	$5 00

Pennsylvania and Continental Net Price
Genuine Philadelphia Mowers:
Styles M. S., C., K., T., N....60&5%
Style A, (all steel).....70&5%
Style E, Low Wheel.....60&5%
Style E, High Wheel.....70&5%
Drexel.....Net prices
Gold Coins.....Net prices
Dewey's.....Net prices
All Day.....Net prices
XX, 12-in. wheel.....60%
Clippers.....50&10&10%

NAILS—CUT STEEL.

Rates $2 25

NAILS—PICTURE.

Discount.....40&15&5%
Brass Head Picture Nails, discount..... 40&10%

NAIL PULLERS.

Giant Pattern, per doz.....$6 25

NAIL SETS.

Octagon.....per gross, $4 00
Round.....per gross, 4 00
Knurled handle, cup point, gro..$7 75

NUT CRACKERS.

No. 12, wood bottom.....$1 85

OILERS.

Tin or Steel.....50%
Zinc.....50&10%
Hammer & Co.'s Malleable Iron, new improved patent.....20%
Hammers' Malleable, old style.....50&10%

PADLOCKS.

Sargent Dog Collar.....70%
Sargent Wrought Steel and Brass.80%

PAILS.

per doz.
Galvanized Sap Pails, 10 qts.....$1 90
" " " 12 qts..... 2 20
" Water " 10 qts..... 1 90
" " " 12 qts..... 2 20
" " " 14 qts..... 2 50

PICKS

Drifting and Poll Picks.....60&10%
Drifting Pick Eyes.....60&10%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws.....25%
Blacksmiths'.....50%
P. S. & W.....60@10%

PIPES.

GAS.

List March, 1900.
⅛ to ½ in., black.....discount, 52%
¾ to 12 " " ..... " 60%
⅛ to ½ " galvanized.. " 29%
¾ to 12 " " .. " 47%

PLANES.

Stanley Planes, new list.....20@25%
Standard Bailey Planes.....20@25%

PLIERS AND NIPPERS.

Swedish Side Cutting Pliers.....40%
" End " " 40%
" Diagonal " " 40%
Halls Compound Nippers.....40%
U. D. F. & T. Co., all kinds.....Net

PLUMBS AND LEVELS.

Common.....75%
Stanley's Wooden, new list.....70%
Disston's.....70%

POCKET LEVELS.

Stanley's Common, new list.....40%

POACHERS.

Buffalo Steam Egg No. 1, per doz. .....$7 20. 50&10%

POLISH.

POLISH—METAL.

U. S. Metal Polish Paste, 3 oz. boxes, per dozen, 50c; per gr. $4.50; ½lb boxes, per doz. $1.25; 1 lb boxes, per doz .....$ 2 25
U. S. Liquid, 8 oz. cans, per doz. $1.25, per gr..... 12 00
Pride of the Bar Metal Polish, per doz $1.60, per gr..... 18 00
Universal Paste. 3 oz. boxes.....60%
Burnishine Liquid ½ pt. per doz.$1 60
Burnishine Liquid 1 pt. " 2 75

POLISH—STOVE.

Dixon's.....per gross, $5 75
Dixon's Black Lead.....per lb 6c
Dixon's Fine Plumbago..... " 9c
Dixon's Graphite Plumbago " 16c

POPPERS, CORN.

Round or Square, 1 qt. per doz., 70@75c
Square, 1½ qt.....per doz., 90c
Square, 2 qt.....per doz., 1 20

POST HOLE AUGERS AND DIGGERS.

Iwan's Patent Post Hole Auger..40%
Eureka Perfection Post Hole Digger, per doz.....$6 50
Atlas, per doz..... 8 00

POWDER.

IN CANISTERS.

Duck, 1 lb each.....45c
Fine Sporting, 1 lb each.....75c
Rifle, 1 lb each $1 00

IN KEGS.

Duck, 6½ lb kegs.....$2 50
Rifle, 6¼ lb kegs 1 25
Rifle, 12½ lb kegs 2 25
Rifle, 25 lb kegs 4 00

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25c
Henis .....per doz. $2 10

PRUNING SHEARS.

No. 0, Henry Pattern..per doz. $1 90
No. 01, " .. " 2 50
No. 14, " .. " 3 15
No. 12, " .. " 3 75
9 in., California Pattern, " 4 25
10 in., " " 5 00
No. 1, Buckeye..... " 6 50
No. 2, " ..... " 8 50
No. 3, Draw Cut..... " 15 50
No. 4, " ..... " 16 50

PULLEYS.

Hay Fork, Svl.Sd Eye, doz $1 60@$2 00
Hot House, Awning, etc 40%
Japanned Clothes Line 35%
Japanned Screw.....33⅓&5%
Japanned Side.....33⅓&5%
Sash (Auger Mortise):
Common Sense, 1¾ in...per doz. 19c
Common Sense, 2 in.... " 26c
Common Sense, Pat.... " 20c
Empire, 2 in..... " 23c

SASH PULLEYS.

Fox No. 3 or No. 7, 2⅝ wheel, ...25c per doz
Fox No. 9, 1¾ wheel.....30c per doz
Extra for plated Finish...25c per doz
Extra for Anti-Friction Bronze Bushing.....10c per doz

RAZORS.

Foz Razors No. 42.....per doz. $20 00
" " " 44..... " " 24 00
" " " 82..Platina " 24 00
Discount 40%
Rantankarus.....

REGISTERS.

List Sept. 1, 1901.

Black Japanned Registers, Ventilators, Faces and Borders, ...70&10&5%
White Japanned Registers, Ventilators and Faces....70&10&5%
Bronzed Finishes in Imitation of Gold, Silver, Copper or Bronze.....40&10%
Nickel plated.....50&10%
Electro-Plated in Brass, Bronze Copper or Oxidized Silver .....40&10%
White Porcelain.....40&10%
Solid Brass and Bronze Metal .....40&10%
} All on new list.

RIVETS AND BURRS.

Copper Belt Rivets & Burrs. .....50&10&5%
Coppered Iron Rivets.....75c
Tinners Rivets.....75c

ROOFING SUPPLIES.

EAVE TROUGH.

Galvanized Eave Trough.75&10&7½%
Double Bead Galvanized Slip Joint Eave Trough....75&10&7½%
Double Bead Galvanized Lap Joint Eave Trough. ..75&10&7½%

GUTTERS

Roof Gutters, Galvanized.... .....75&10&7½%

PIPE.

Plain Round Pipe, Galvanized. Nested.....70.10-2½%
Plain Round Pipe, Galvanized. Unnested.....70&10%

VALLEYS.

Valleys, in Rolls, IC and IX Terne.70%
Valleys, in Sheets, IC and IX Terne.....70%
Valley Galvanized Iron, Sheets .....60&20%
Valley Galvanized Iron, Rolls.60&20%

HOOKS.

Flashing Hooks.....10%
Wrought Conductor Hooks.....60%

CUT-OFFS.

Kuehn's Galv.....50%
Acme Galv.....10&10%
Acme Tin.....60&10%
Centennial Tin, new list.....60%

EAVE TROUGH HANGERS.

Eave Trough Hangers, Single and Double Bead, Imperial.....15%
Eave Trough Hangers, Single and Double Bead, Wire.....20%

ELBOWS.

One Piece, Conductor Elbows, Galvanized Corrugated.....60%
Adjustable Elbows, Tin.....60%

PREPARED ROOFINGS.

Imperial 2-ply Tarred Roofing complete.....$1 75 per sq.
Imperial 3-ply Tarred Roofing, complete.....$2 00 per sq.

ROPE.

Per lb.
Manila, 7-16 inch diameter and larger.....13½c "
Sisal, 7-16 in. and larger..11 c "

SASH CORD.

Braided, Drab.....lb 25c
Braided, White, common.....lb 19c
Cable Laid Italian....lb, A 18c, B 16c
Common India.....lb 9c@9½c
Cotton Sash Cord, twisted.....12@16c
Patent Russia.....lb 12½@13c
Cable Laid Russia.....lb 13½@14c
India Hemp, braided.....lb 14@15c
India Hemp, twisted.....lb 10@12c
Patent India, twisted.....lb 10@12c
Pearl Braided, cotton.....lb 17@18c
Massachusetts, white.....lb 22½c
Massachusetts, drab.....lb 20½c
Eddystone, Braided, cotton....lb 19c
Ha mony Cable Laid Italian...lb 18c
Ossawan Mills:
Crown, Solid Braided, white..lb 18c
Braided, Giant, white.....lb 17c
Peerless:
Cable Laid Italian.....16c
Cable Laid Russian.....14c
Cable Laid India.....12c
Braided India.....18c
Phœnix, white.....19c
Samson:
Braided, Drab Cotton.....lb 32½c
Braided, Italian Hemp.....lb 32½c
Braided, Linen.....lb 40c
Braided, White Cotton, Spot, lb.....28½c
Silver Lake:
A quality, Drab, 40c.....15¢
A quality, White, 35c.....15¢
B quality, Drab, 35c.....15¢
B quality, White, 30c.....15¢
Italian Hemp, 40c.....15¢
Linen, 57½c.....15¢

SASH LOCKS.

Ives, Patent.....60@60&5¢
Harlew's Burglar-Proof Ventilating.....Net
Payson's Perfect.....Net
Payson's Signal (new list).....Net

SASH WEIGHTS.

Sash Weights, f. o. b., Chicago, per ton.....$25.00

SAWS.

Atkins' Circular.....Net
Atkins' Band.....Net
Atkins' Cross Cuts.....Net
Atkins' Mulay, Mill and Drag....40%
Atkins' One-Man Saw.....Net
Atkins' Circular Solid and Inserted Tooth.....50¢
Atkins' Bands over 2 in. wide....60%
Atkins' Bands under 2 in. wide.....57&10¢
Atkins' Mill, Mulay and Drag....50¢
Atkins' Cross Cuts.....40¢
Atkins' One-Man.....40&10¢
Atkins' Narrow Cross Cuts.....40%
Atkins' Wood Saws and Blades.....40&10¢
Atkins' Hand Saws.....40¢
Atkins' Compass Saws.....50¢
Atkins' Butcher Saws.....40&10¢
Disston Circular Solid and Inserted Tooth.....50¢
Disston Cross Cuts.....Net
Disston Narrow Cross Cuts.....Net
Disston, Mulay, Mill and Drag...40¢
Disston Framed Woodsaws.....35¢
Disston Woodsaw Blades.....40¢
Disston Woodsaw Rods.....25¢
Disston Handsaws, Nos. 12, 99, 9, 16, D100, D8, 120, 76, 77, 8.....25¢
Disston Hand Saws, Nos. 7, 3....30¢
Disston Compass, Keyhole, etc..25¢
Disston B'tch'r Saws and Blades 35¢

SAW SETS.

Common Lever.....per doz. $ 1.20
Stillman's Lever.....per doz. 1.30
Leach's.....per doz. 5.00
Nash's.....per doz. 4.20
Monarch.....per doz. 6.50
Morrill's, Old Style....per doz. 5.00
" No. 1.....per doz. 7.25
" No. 3 & 4 X Cut.per doz. 11.50
" No. 11.....per doz. 8.40
Aiken's Pattern.....per doz. 3.50

SAUSAGE STUFFERS AND PRESSES—ENTERPRISE.

No.	15	25	35
New list	$4.50	$5.50	$7.00

Discount 25¢.

SAW FILERS.

Stearns'.....25¢
Silent saw.....35¢
Sargent's.....60&30¢
Reading.....37½¢

SCALES.

Union Family, 1 oz. by 240 lbs., ...each, $ 2.15
Common Platform, capacity 1000 lbs.....each, 10.50
No. 33, Turnbull's Patent Market.....each, 8.50
No. 43, Turnbull's Patent Market.....each, 9.00

SCREWS.

BENCH AND HAND.

Bench, Iron.....per doz. 40¢
Bench, Wood, Beech..per doz. $3.50
Hand, Wood.....20¢

COACH, LAG AND HAND RAIL.

Coach and Lag, Gimlet Point.70&10¢
Hand Rail, list Jan. 1, 1871.....75¢

JACK SCREWS.

Jack Screws.....7

WOOD.

MANUFACTURERS' CIRCULAR PRICE. New List

Flat Head Steel.....90&10¢
Round and Oval Head Steel..85&10¢
Flat Head Brass.....85&10¢
Round and Oval Head Brass..80&15¢
Flat Head Steel, Japanned...80&15¢

SCYTHES.

Blood's.....$ 5 50
Clover..... 5 50
Grain Clipper, Blood's..... 10 50
Hollow Clip..... 5 50
Silver Clip..... 5 50
Honest Dutchman..... 5 50

SCYTHE STONES.

Black Diamond.....per gross, $7.75
La Moille..... " 7.00
Willoughby Lake..... " 6.35
Pikes Gen. No. 1 Ind. Pond..... " 4.75
Green Mountain..... " 4.25
Red End..... " 3.15

SHEARS.

	7	8	9 in.
Best	$16.00	$18.00	$20.00 gro.
Good	13.00	15.00	17.00 gro.
Cheap	5.00	6.00	7.00 gro.

Straight Trimmers, &c.:
Best Quality Jap.....70@70&10¢
" Nickel.... 60@60&10¢
Fair Quality, Jap.....80@80&5¢
" Nickel.....75@75&10¢
Tailors' Shears.....40@40&10¢
Acme Cast Shears.....40@40&5¢
Heinisch's Tailors' Shears.40@40&5¢
Wilkinson's Hedge.....50¢
Wilkinson's Sheep.....1900 list, 50¢

NO. BBA. SHEEP SHEARS.

	6 in.	6½ in.	7 in.
Reg. Grip	$11.00	$11.35	$12.00 doz.
Nar. Grip	11.20	11.00	12.15 "

SHINGLES, METALLIC.

Eastlake I. C. Tin Shingles, painted, per sq.....$4.25
Eastlake I. C. Tin Shingles, galvanized, per square..... 6.00
Octagon Fluted I. C. Tin Shingles, painted, per square..... 5.50
Octagon Fluted I. C. Tin Shingles, galvanized, per square... 7.25

SIEVES.

Champion.....per doz. $1.00
Hunters' Genuine.....per doz. 1.20
" Imitation.....per doz. 1.00
Tin Rim, 16 mesh plain wire " 1.40
Wood " 16 mesh plain wire " .85

SIFTERS.

Eclipse.....per gr. $15.00
Hunter's Genuine.....per gr. 16.00

SKATE SHARPENERS.

Skate Sharp., Eureka, pr dz. $2.00 net
Washer Cutters, Woodard's, per doz..... 2.50 net

SLATE.

GENUINE NO. 1 BANGOR.

24x14, 24x12, 12x 8	$3.50 pr sq.	20x10, 18x10, 18x 9, 16x 8	$4.50 pr sq.
22x11, 20x12, 18x12, 16x12, 14x10, 14x 8, 14x 7	$3.75 pr sq.	16x10, 16x 9	$4.25 pr sq.
		12x 7, 12x 6	$3.25 pr sq.

GENUINE NO. 1 BANGOR RIBBON.

24x14, 24x12	$3.00 pr sq.	20x10, 18x10	$3.50 pr sq.
22x11, 20x12, 14x 8, 14x 7	$3.25 pr sq.	18x 9, 16x10, 16x 8	

SLEDGES—HEAVY HAMMERS.

Sortnig, regular and Oregon pattern Striking California Hand Drilling and Stone & Blacksmith Sledges,
Under 5 lb.....75¢
Over 5 lb.....75@5¢
Coal Miners' Sledges.....75¢
Single and Double Faced Mason's and Toothed Mason's, new list.75¢

SMOKED BEEF SHAVERS—ENTERPRISE.

New List, $8.00. Discount.....25¢

SNAPS.

German.....40@40&10¢
Covert Mfg. Co.:
Derby.....35&2¢
High Grade.....45&2¢
Jockey.....40&2¢
Trojan.....45&2¢
Yankee.....35&2¢
Yankee, Roller.....30&2¢
W. & E. T. Fitch Co.:
Bristol.....40&10¢
Empire.....50&5¢
German.....40¢
National.....50&5¢
Perfect.....45¢
Clipper.....50&5¢
Champion.....40¢
Security.....40¢
Victor.....60&5¢
Oneida Community:
Solid Steel.....65@65&1¢
Solid Swivel.....65&10@65&10&10¢
Sargent's Patent Guarded..66⅔&10¢

SOLDERING FURNACES.

No. 3 Gems, tin reservoir.....$6.00
No. 6 Gems, copper reservoir.... 8.50
Gem Gas Pots..... 2.25
Clayton & Lambert No. 1 Fire-Pot..... 6.00
Clayton & Lambert's Special Fire-Pot..... 4.50

SPRINGS, DOOR.

Star (Coil) list Oct. '95.....net
Torrey's Rod, 30 in..... .....per doz. $1.25@$1.35
Warner's No. 1.....net 75

SQUARES.

Steel and iron.....70&10¢
Nickel plated.....70&10¢
Try squares and bevels, Disston's.....33⅓&10¢
Bemis and Call, pocket.....30¢
Winterbottom's try & mitre.....50¢
Starrett's.....25¢
Stanley's Rosewood Handled, T., new list.....40&10¢

STAPLES.

Barbed Blind.....per lb., 9½&10c
Poultry Netting, per lb., 5c in 10 lb bxs

STAPLE PULLERS.

Russell Staple Pullers..per doz., $8 75

STOVE PUTTY.

1, 10&25 pound Cans.....per lb., 5c
500 pound Kegs.....per lb., 4½c

STROPS.

RAZOR.

Emerson.....60 to 60&5¢
Imitation..... ....20, 10&5¢
Torrey's.....20¢
Tower & Lamont.....per doz $4 00
04 Combination.....per doz $3 75

TACKS.

List Jan. 15, '99.
Carpet Tacks, American.....90&10¢
American Cut Tacks.....90¢
Swedes Iron Tacks.....90&20¢
Swedes Upholsterers' Tacks..90&40¢
Gimp Tacks.....90&40¢
Lace Tacks.....90&20¢
Trimmers' Tacks.....90&20¢
Looking Glass Tacks.....70&10¢
Bill Posters' & Railroad Tack90&40¢
Hungarian Nails.....8 ¢
Common and Patent Brads...80&10¢
Trunk and Clout Nails.....80¢

TRAPS.

GAME.

Oneida Pattern.....75&5@75&10&5¢
Newhouse.....50¢
Hawley & Norton.....70¢
New Victor.....80¢
Star (Blake Pattern)...65&10@70&5¢

MOUSE AND RAT.

Mouse, Wood, Choker, doz. holes..10c
Mouse, Round or Square Wire, doz.....$0 85@1 00
American Pattern French Rat and Mouse Traps—
No. 1, Detroit Marty Pattern, per doz. $4 50; in ½ gro. lots per doz..... $4 00
No. 2, Detroit Marty Pattern, per doz. $3 25; in ½ gro. lots per doz..... $3 00
Detroit Marty Pattern Mouse per doz. $2 00; in ½ gro. lots per doz..... $1 75
Diamond Joe Mouse Traps, per doz.....60c
Diamond Joe Rat Traps, per doz.$1 00
Marty French Rat and Mouse Traps. (Genuine:)
No. 1 Rat, per doz.....$13 50
No. 3, Rat, per doz. $6 00; case of 50.....$6 50 doz.
No. 5, Mouse, per doz. $2 75, case of 72.....$3 00 doz.
Schuyler's Rat Killer, No. 1 per gro. $3 00; No. 2, per gro. $30 00; Mouse, No. 3, $18 00.. 50¢

FLY.

Balloon, Globe or Acme..... doz. $1 15@1 25; gro.....$12 00
Harper, Champion or Paragon. doz. $1 25@1 40; gro.....$15 00

TWINE.

Flax Twine—

	BC	B
No. 9, ¼ and ⅓ lb. Balls	20c	24c
No. 12, ¼ and ⅓ lb. Balls	17c	20c
No. 18, ¼ and ⅓ lb. Balls	14c	17c
No. 24, ¼ and ⅓ lb. Balls	14c	17c
No. 36, ¼ and ⅓ lb. Balls	13c	16c
Chalk Line, Cotton, ½ lb. Balls	18@20c	

Cotton Wrap., 5 lb. Balls to lb 16 to 20c
2-Ply Hemp, 1¼ lb. Balls (Spring Twine).....12@15c
3-Ply Hemp, 1 lb. Balls.....12@15c
3-Ply Hemp, 1½ lb. Balls.....
2, 3, 4 and 5-Ply Jute, ½ lb. Balls..10c
Mason Line Linen, ½ lb. Balls....45c
No. 264 Mattress, ¼ and ½ lb. Balls.....34c
Wool.....5½@6c

TWINE BOXES.

No.	20	30	25	35	131
Dozen.	$1 35	$1 35	$2 65	$3 65	$3 50

VISES.

Solid boxes.....50¢
Parker's.....20¢
Howard's.....35¢
Bonney's.....35¢
Trenton.....40¢
Stearns'.....50¢
Cheney's.....20¢
Massey's.....25¢
Parallel.....30&5¢
Holland's.....35¢
Stevens'.....25¢
Miller's Falls.....40¢
Prentiss.....20¢

TROWELS.

Disston Brick and Pointing.....30¢
Disston Plastering.....25¢
Disston "Standard Brand" and Garden Trowels.....33⅓¢
Never-Break Steel Garden Trowels.....gro. $7 00
Peace's Plastering.....30¢
Rose Brick and Plastering.....20¢
Woodrougn & McParlin Pl'st'ing20¢

VISES.

Bonney's Standard & Champion.30¢

WASHERS.

LEATHER, AXLE.

Solid.....80&10&10@85¢
Patent.....85&10@85&20¢
Coil: ⅜ 16c, 1 17c, 1⅛ 20c, 1¼ inch 25c per 100

IRON OR STEEL.

Size bolt 5-16 ⅜ ½ ⅝ ¾
Washers $5 20 $4 30 $3 00 $2 80 $2 60
In lots less than one keg add ¼c per lb; 5-lb boxes add ⅛c to list.

CAST WASHERS.

Over ½ inch, barrel lots, per lb.....1½@1¾

WASHING MACHINES—BOSS.

No. 1	No. 2	No. 5	No.
$4 75	$5 25	$5 75	$5 25

WASH TUBS.

Wash tubs, gal'ized, No. 1, pr dz $5 50
" " " " 2, " 6 00
" " " " 3, " 6 75

WEDGES—WOOD CHOPPERS.

Lake Superior & Oregon Pattern,75¢
Falling.....75¢
Saw.....per lb 9c

WELL WHEELS.

8-in. $1 90.....10-in. $2 20
12-in. $3 00.....14-in. $5 50

WIRE AND WIRE GOODS.

Brt. and Ann., 6 to 9,70&10@70&10&5¢
Brt. and Ann., 10 to 18,72½@72½&10¢
Brt. and Ann., 19 to 26,75&7½@75&10¢
Brt. and Ann., 27 to 36..... .....75&10&5@75&10&7½¢
Cop'd and Galv., 6 to 9.....70@70&10¢
Cop'd and Galv., 10 to 18..... .....70&10@70&10&5¢
Cop'd and Galv., 19 to 26..... .....75&7½@75&10¢
Cop'd and Galv., 27 to 36..... .....75&10@75&10&5¢
Tinned, 6 to 14.....75@75&5¢
Tinned, 15 to 18.....70&5@70&10¢
Tinned, 19 to 26.....70@70&5¢
Tinned, 27 to 36.....65&10@70¢
Annealed Wire on Spools..... .....70&5@70&10¢
Brass and Copper Wire on..... Spools.....50¢
Brass, list Feb. 26, '96.....15¢
Copper, list Feb. 26, '96.....20¢
Cast Steel Wire.....50¢
Stubs' Steel Wire, $6 00 to £.....40¢
Bright Wire Goods.....85¢
Annealed Wire in Stones.....70&5¢
Brass Wire in Coils.....15¢
Copper Wire in Coils.....20¢
Brass and Copper Wire in Spools50¢

BRIGHT WIRE GOODS.

List April 1, 1901.....85¢

WIRE CLOTH AND NETTING.

Galvanized Wire Netting.....85¢
Ptd Screen Cloth, per 100 ft.....$1 00
Light Hardware Grade:
2-8 Mesh, Plain (8c list) sq ft., full rolls.....1⅞c
2-8 Mesh, Galv (8c list) sq ft., full rolls.....2¾c
Poultry Netting.....85¢

WRENCHES.

Agricultural.....70&10¢
Case lots..... ....75¢
Acme.....60¢
Baxter's S.....60¢
Bull Dog.....70¢
Coe's Genuine.....40&10&0¢
Coe's "Mechanic's".40&10&10&5&5¢
Alligator.....60&10&10¢
Bemis & Call's:
Adjustable S.....35&5¢
Adjustable S Pipe.....40¢
Briggs' Pattern.....30&10¢
Combination Black.....40&5¢
Combination Bright.....40¢
Cylinder or Gas Pipe.....55¢
Extra Heavy.....45¢
Merrick's Pattern.....50¢
No. 3 Pipe Bright.....55¢
Bindley Automatic.....30¢
Boardman's.....33⅓¢
Donohue's Engineer.....40&10¢
Eagle.....50&10¢
Gem Pocket.....30¢
Hercules.....70¢
Knife Handle, (Machinists' W. & B.).....40&10¢
Case lots.....50&5¢
Less than case lots.....6¢
Improved Pipe (W. & B.).....50&10¢
Solid Handles, P. S. & W.....50&5¢
Sovereign..... 100

WRINGERS.

CLOTHES WRINGERS.

Nos 22&110, guaranteed, pr doz $22 00
No. C 350, Novelty..... " 22 50
No. 3, Empress..... " 25 50
No. 150, Sunshine..... " 18 00
No. 130, Mendota..... " 18 00
No. 12, Success..... " 16 00
No. C 500, Royal..... " 28 00
Blue Bell, Ball Bearing " 35 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes, U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—One Morgan & Wright vulcanizer, pat. 1897, for gas; also one set casing tools as good as new. L. A. Fletcher, Chippewa Falls, Wis. 14

For Sale—My equity of $5,500 in a strictly modern four-flat brick building; well rented; on north side of Chicago, for a clean stock of hardware outside of city; will put in some cash if needed. Address "Equity," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 14

For Sale—Hardware and tin shop; up-to-date stock; in northern Illinois; good town; 900 population; waterworks, electric light; good business; sales of 1901 $700; will increase sales coming year; fine dairy country; must sell before April 30; reason, other business. Address M. D., care of The American Artisan, 69 Dearborn st., Chicago, Ill. 14

For Sale—Well established hardware, tin and stove business, together with a well paying tin-shop; also in good location for selling farming implements; with or without property; good reason for selling. Address, Chas. Cammerer, 38 Valley Street, Dayton, Ohio. 14

A New and Up-to-Date Stock of Hardware and Stoves for Sale—Located in eastern Nebraska in a little city of 7,500 people. Large manfg. establishments. Doing profitable business; stock will invoice about $2,000, including fixtures. Address Fixtures, care the American Artisan, 69 Dearborn St., Chicago, Ill. 14

For Sale—$6,000 stock stoves and tinware, roofing, spouting and plumbing stock; a good chance to secure a first-class stock doing a good business in a town of 9,000, and good country trade; old established trade in central Ohio town. Address "Ohio," care The American Artisan. 13

For Sale—Hardware business and good will of trade; tinning, furnace and plumbing connected with the business; long established; location, Cleveland; good reasons for selling; will be sold at a bargain if sold soon. Address "Smith," 296 Kanard st., Cleveland, O. 13

No. 1 Peck Stow & W. shear and punch, list $16, for $8.00; two sets slater's tools, both $5.00; two pair Burrit's roofing double saws, list $30, for $10. Address Graves Sheet Metal Works, Kansas City, Mo. 13

For Sale—Stock of hardware; in railroad division town of 2,500 inhabitants and doing business of $25,000 annually. Address "M. F.," care of The American Artisan, 69 Dearborn Et., Chicago, Ill. 12

Wanted—Location for hardware store; and anyone desiring a No. tinner for partner. Address "No. 41," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

For Sale—Cheap for cash, one full set P. S. & W. tinners' tools, including 4-foot brake. List on application. Lock Box 758, South Bend, Ind. 12

For Sale—Hardware stock, heating and plumbing business; stock will invoice about $4,500.00; located in one of best small towns in Central Illinois. Can be bought with or without building. Address "Illinois," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

For Sale—A good hardware and harness stock; in a German Iowa town. Address "Iowa," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

For Sale—A stock of general hardware, tinsmithing and plumbing; in a good factory town in Southern Michigan of 4,000. Stock will invoice from $2,500 to $3,000. Address "No. 100," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 11

TINNERS' TOOLS.

For Sale—A 10-foot new Robinson Pattern Brake with lot tinners' tools, machines, roofing and slater tools, etc., for $500.00. "W. H. J.," care of Illinois Roofing and Supply Co., 23 Lake st., Chicago, Ill. 13

Wanted—2nd hand drop press and 36 in. or 48 in. cornice brake, iron or wood. Address, V. H. P., 134 3d St., Aurora, Ill. 11

HELP WANTED.

Wanted—Traveling salesman in Northern Iowa; must be a hustler and have an established trade. Address "West," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 14

Tinner wanted in country shop; a steady man; one who can do pump work and repair bicycles preferred. W. F. Goldspohn, Arlington, Wis. 14

Wanted—A man that can do inside and outside tin work, furnace work and plumbing; must be sober; will contract by the year, with no loss of time. Address P. O. Box 155, Bryan, Ohio. 14

Tinners Wanted—All inside work, steady time and good wages. Address The Arras Cream Separator Co., Bluffton. 14

Wanted—A good all-round tinner; good job for right kind of man. 121 E. 2nd st., Alton, Ill. 14

Wanted—At once, a man to do tin work, pump work and iron mill work. Also to help in the store. Albert Hanson, Kiron, Ia. 14

Wanted—Cornice foreman and pattern cutter. A first-class foreman and pattern cutter in a large western city, one that has had experience in superintending and handling of workmen, must come well recommended, state age, wages expected and former employers. Address Mesker & Bro., St. Louis, Mo. 14

Wanted—A second-hand 31 in. foot power squaring shear; state make, condition and price. Address S. H. Curtis & Sons, Waverly, Ia. 14

Wanted—To exchange steam threshing rig for steam automobile. Address J. 156, Varna, Ill. 14

Wanted—Five first-class sheet metal workers; steady employment guaranteed if satisfactory. Klauer Mfg. Co., Dubuque, Ia. 14

Wanted—A reliable tinner who understands the furnace, wind mill and pump business; German preferred; good steady job. For further information address R. R. Craig, Willman, Ia. 14

Wanted—A man who can do plumbing, hot water and steam heating. To the right man we can give steady employment. Miles & Ulmer, Miles City, Mont. 13

Wanted—At once, a sober and industrious tinner, and a good salesman in store, one that can do bicycle and gun repairing, brazing and furnace work; one that can speak German preferred. Steady work to the right man; answer, stating wages. Mann & Co., Pierson, Iowa. 13

Wanted—Stove salesman for state of Illinois and Iowa. Must be able to command trade. Address Stove Salesman, care of The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Wanted—Bright young man who is up on tinsmithing and bicycle work and is also good on repair work; will pay good wages. Address "Minnesota," care of The American Artisan, 69 Dearborn st., Chicago. 13

Wanted—At once, a first-class tinner and slate roofer; must be good all-round mechanic; steady job the year through for good man. Answer at once, stating wages, age and experience. Address H. VonBlon, Upper Sandusky, O. 13

Wanted—Young man with one or two years' experience at tinner's trade; wages not less than $8.00 a week, to work as helper, with chance to learn more about the business. Address P. McCartney, West Chicago, Ill. 13

I want an all-round tinner; one that can do all kinds of tinwork inside and outside; also hot air furnace work; is a steady job; must be sober and honest; nothing but first-class man wanted. Address "All Round," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 13

Wanted—Position in hardware and implement store by young married man; have had about twelve years' experience; sober and industrious. Address Lock Box 2, Cisco, Ill. 13

Wanted—A first-class tinner and furnace man; one that can do general tinsmithing and pipe and pump work and bicycle repairing; steady work and good wages to the right man. Write, stating age, married or single, salary expected. McIntosh Hardware Co., Kohspell, Mont. 13

Wanted—A good, sober, honest and reliable tinner; steady work for the right man; state wages, Buol Bros., Randolph, Neb. 13

A good all-round tinner wanted; wages $2.00 per day; steady job to a good man. Address Chas. Skidd, 121 Mil. ave., Kenosha, Wis. 13

Wanted—At once, an A1 all-around tinner and sheet metal worker, that understands furnace work, metal ceiling work, also cornice work; will give steady work at good wages; no intoxicants need apply. Wm. R. Williams, Lock Box 505, Mason City, Ia. 13

At once, a good, sober tinner that can do some plumbing and clerking in a hardware store if needed; a steady job for the right man; will assist in paying the railroad fare out here, which is now from Chicago $30.00; a fine country and good climate; a married man preferred; will pay good wages and have a nice place to work; in one of the best farming towns in state of Washington; state age, experience and habits in first letter, as we may telegraph answer. Address Barroll & Mohney, Colfax, Wash. 13

Wanted—Good tinner. Address F. B. Karl, Delaware, Ohio. 13

Wanted—To correspond with party having some experience in tin shop and bicycle repairing: good, steady job to right party. Address Box 113, Dallas, Wis. 13

First Class Tinner Wanted—By April 1st, 1902; one that understands some plumbing and pump work, good salesman; steady work to right party; give reference; and state wages and how long experience. Lock Box 87, Armstrong, Iowa. 12

Wanted—A sober tinner who can do inside and outside work; steady job for right man; would like a single man who can tend to his work and help clerk in store if needed; easy job; write at once; give references and wages. A. W. Goldschmidt, Kinsley, Kansas. 12

Wanted—A tinner who understands hot air heating, and is steady, sober, and speaks German or Scandinavian. Wages $10.00 per week and 15% of profits. J. W. Ryan, Salem, S. D. 12

Wanted—A young man, German preferred, with several years' experience at tinners' trade; and willing to make himself generally useful in retail hardware store; steady job; in answering state salary expected. Address "German," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

Wanted—At once, a good, all-around tinner and furnace man; with knowledge of plumbing to take charge of all outside work and willing to work anywhere about the business. It's a good, steady job; he must be sober and honest. Address "Soon," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

Wanted—A young man that can do all kinds of inside and outside tinwork; also hot air furnace work; must be sober and reliable; steady job the year around. Address "Outside," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

Wanted—Expert spinners; to work on spinning lathes in stamped ware factory, on iron shapes. Address, Lisk Mf'g Co., Limited, Canandaigua, New York. 12

Wanted—A first-class tinner; for roofing, cornice work, gutters and pump work; one who understands plumbing and hot water heating preferred. Must be sober, industrious and honest. Good wages; steady work the year through. Address H. P. Fulton, Marshall, Minn. 12

Wanted—A young, active, all-around tinner; one who can do all kinds of general job work in a country town; competent to attend and look after the store when needed. Don't want anyone who is a "Bum" or a "Lusher;" steady work to right kind of a young man. A German or one who speaks the tongue preferred. Address "Box A. K.," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 12

Two Tinners Wanted—A first man and a second man; must be good on furnace, roofing, eavetrough and job-work; good wages; steady work. Only first-class men need apply. E. N. Howell Hardware Co., Dixon, Ill. 12

SITUATIONS WANTED.

Situation—As first-class tinner; experienced in all kinds of tin work; blow pipe and pump work; strictly sober. Will furnish references. Harry Wright, 801 Oak St., Monroe, La. 14

Situation Wanted—As salesman, or take charge of installing department, practical furnace, steam and hot water heating; knowledge of drafting; fifteen years' experience. Address V. A., care of The American Artisan, 69 Dearborn st., Chicago. 14

Situation Wanted—By a good, first-class tinner and iron worker; extra good on job work; temperate; reliable; references given; would like situation in town of about 18,000 to 20,000. Address Box 75, Oelwein, Iowa. 13

Situation Wanted—By a first-class tinner and furnace man; have had 18 years' experience; can do hot water heating, pump and mill work. Address, J. H. Tugoning, Shullsburg, Wis. 12

Wanted—A situation as salesman or manager; for stove foundry by a first-class man of 26 years' experience; good references; understands his business thoroughly; has been manager for some time. Box 469 P. O., Louisville, Ky. 12

Partner Wanted—First-class sheet metal worker and furnace man, with knowledge of plumbing; would go in as working partner with man already established in business. Place must have 2,000 or more inhabitants, and be located in Iowa, Minnesota or South Dakota. No money to invest. Address "Partner," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 11

Situation Wanted—By first-class tinner and furnace man; experienced in pump work and pipe fitting; married man; wants steady job; state wages. Address "First Class," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 11

Wanted Position—By experienced man, position as clerk in hardware store; have fair knowledge of tinners' trade, can repair bicycles; can furnish reference. Address, O. S. Butler, Bloomfield, Mo. 11

SPECIAL NOTICES.

WANTED

A Manager for Chicago branch of a large Eastern Manufacturer of Furnaces, Ranges and Boilers. Fine opportunity for a man of energy and ability who controls some trade. Address, with full particulars, MANUFACTURER, care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 14

FOR SALE.

Hardware business and good will of trade; long established. $9,000 to $10,000; town of 50,000, central southern N. Y. On four trunk line railroads; is special opening for wholesale and retail business. Advantageous terms will be made with an immediate buyer. Address "Hardware Business," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill.

FOR SALE.

Complete set tinner's tools and machines; Stove's Encased No. 1, nearly new. Full line of hand tools for tin and sheet iron work. Address George Stanton, Chinese Ginseng Farm, Apulia Station, Onondaga Co., N. Y. 10

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Do You Want Your Own Hardware or Cutlery Building?

Tenant can name my new modern up-to-date building, 12 Elm Street, near Duane Street, New York, five stories, electric elevators, well lighted. A good permanent tenant can secure a bargain. Address the owner John T. McRoy, 302 Broadway, N. Y.

SECOND-HAND Wrought Iron Pipe, sizes 1 to 8 inches, for sale cheap. Manufacturers and dealers in steam and gas engines, boilers, tanks, oil-well supplies, etc.

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Titusville, Pa.

Branch Office: 511 Washington Street, Marion, Ind.

WANTED.

Tinners to increase their means by soliciting subscriptions for THE AMERICAN ARTISAN. Liberal commission. Write for particulars to THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

James M. Kellogg,

Bozeman, Mont., writes:

"For the general information it contains, your book, 'The Manual of Receipts,' is well worth the money."

J. W. Chandler,

Lily Lake, Ill., writes:

"Please take my add out of your paper for a tinner. I have received answers from Brooklyn to California. I think I ought to be able to pick out one."

Dividends

are paid out of the profits of a business. Stockholders expect dividends. Economic management creates profits. Shippers and manufacturers can pay larger dividends by being located on

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WHY? *Because* if you were on its line there would be

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From one to five days' time saved in the receiving and shipping of your products.
This is worth looking into.
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It is the most effective article in existence for the repairing of firebrick in stoves and furnaces. We will send you sample and prices free for the asking.

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They give a whiter, stronger, steadier light than the electric arc. Operate easily, safely, satisfactorily. Save money—actual 600 Candle Power at a cost of one-half cent an hour. Think of it!

The money they save adds to your profits. Everybody likes them but the gas and electric light companies. Write for circulars. GOOD AGENTS will find this a splendid proposition. They sell fast on pure merit.

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Dept. 4, CHICAGO, ILL.

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The Barrett Hardware Co., Joliet, Ill., write:

"Gasoline and supplies for six "M. & M." Lamps cost us $45.46 last year, an average of 60 cents a month per lamp. We believe we had as good a light as though we had six electric arc lamps at a cost of $360."

No wonder that over 30,000 "M. & M." Lamps are in daily use all over the United States—they kill big gas and electric light bills. 'Twill pay you to investigate.

Write for circulars to-day.

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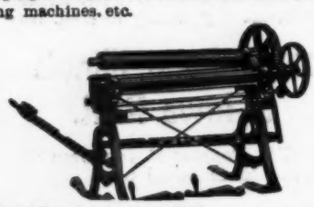
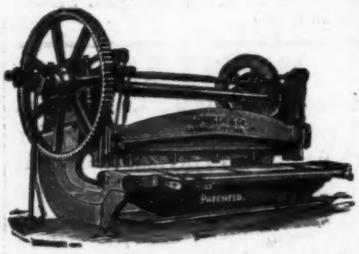
Automatic Self-Opening Rolls, quickly and easily adjusted, all sizes to 20 feet. Also Crimping Rolls, Hand and Power Punches, Labor-saving machines, etc.





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Our metal skylights give satisfaction. They are so constructed that all condensation is carried to the curb and discharged through weep holes on to the roof without soaking between laps.

The peculiar construction of the curb on our skylights renders counterflashing unnecessary.

Frames of galvanized iron or copper, with glass of any kind or thickness.

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C. SIDNEY SHEPARD & Co., Kansas City, Mo.
HOLBROOK, MERRILL & STETSON, San Francisco and Los Angeles, Cal.
C. J. SULLIVAN, 1112 Union St., Seattle, Wash
ILLINOIS ROOFING & SUPPLY Co., Chicago, Ill.

Dreis:, Andrews & Krump,
MANUFACTURERS, 3039 & 3041 S. Halsted St., CHICAGO, ILL.

Greig Brothers, Mitchell, Iowa, write: — "Please discontinue ad for Tinner, we have had applications from Ohio to Northern Wis."

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when buying a torch are safety, convenience, durabilty and economy in the consumption of fuel. (You buy fuel all the while.) The No. 2 Torch is well made, is strong and durable. The burners are powerful, and the saving of gasolin will soon pay for the torch. Try it.

Your money back if it doesn't please.

Jobbers sell at factory price, or we will ship by paid express upon receipt of $3.00.

Clayton & Lambert Mfg. Co.,
Detroit, Mich., U. S. A.

A great many dealers understand by this time what our trade mark signifies. It means Merit, Originality and Exclusiveness in Metal Ceilings.

It used to be predicted, when we first began to place our "Classik" Metal Ceilings on the market, that there was no demand for such high-grade, symmetrical and exclusive creations.

Either there was a demand, or we have created it, for our goods are called for from one end of the Continent to the other, and even competitors are recognizing their merit to such an extent as to copy them.

We had an advanced position when we originated and put in operation the idea of producing Metal Ceilings in complete "classified" designs of famous artistic style.

It is all very clear to us why our line has been successful. They are artistic and adapted to all classes of buildings, and a source of gratification to all who have had a desire to decorate rooms in harmony throughout.

If you are seeking up-to-date ceilings (and not a conglomeration of past ideas) we are competent to supply you.

Send sketch and correct measurement of room for estimate.

The Berger Manufacturing Co. CANTON, OHIO

SPECIALTIES: Roofing, Siding, Eave Trough, Etc.

New York Office: 210 E. 23d St., New York, N. Y.
New England Branch: 176 Federal St., Boston, Mass.
Philadelphia Office: 1218 Filbert St., Philadelphia, Pa.
Western Branch: 19-21 S. Main St., St. Louis, Mo.

FOR

Coke Plates — Charcoal Bright Plates
Terne Plates — Galvanized Iron
Eaves Trough, Conductor, Roofing, Siding

We have a large stock and can make immediate shipment

ILLINOIS ROOFING & SUPPLY CO.

23 Lake Street, CHICAGO

FELT
METALLIC
ASPHALT

Roofings

METALLIC
SHINGLES

"THE QUICK SHIPPERS"

W. J. BURTON & CO.,
Detroit, Mich.

Art Metal Ceilings

For Interior Decorations.

Write for Catalogue and Prices.

We have 40 different designs to select from. Our Stamped Ceilings are the most perfectly embossed ceilings on the market.

Estimates Furnished on Special Work.

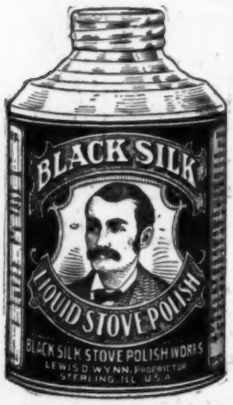
SPECIALTIES:

Steel Ceiling, Zinc and Copper Ornaments, Statuary in Bronze, Zinc and Copper, Crestings, Finials, Capitals, Galvanized Steel Horses for Merry-Go-Rounds, Copper Plated Ceilings in Antique Finish, etc., etc.

Friedley & Voshardt

194-202 Mather St., CHICAGO, ILL.

Black Silk Stove Polish



is BBBLLLAAACCCKKK.

It is the Blackest that ever happened.

It is made of special ingredients under a zealously guarded secret formula, and is far superior to all other polishes.

Its price is right.

Lewis D. Wynn
STERLING, ILL.

Large 10 oz. Can.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case from Your Jobber.

Nickel Plate Stove Polish Co.
CHICAGO.

REPAIRS FOR ALL STOVES

Pipe Dampers, Mica, Stove Rods, Paste, Stove Putty, Stove Knobs, Etc.

Wm. T. Dust Co.,
231 Brush St., DETROIT.

REPAIRS FOR ALL STOVES AND RANGES.

A. G. Brauer, 316-318 North Third St., ST. LOUIS, MO.

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb., and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

CHAS. E. MARIS, Williamsburg, Ia., WRITES: "THE AMERICAN ARTISAN certainly has a large circulation from the inquiries I received."

Paint Points

will be furnished the trade who write us for catalogue.

Buckeye Paint & Varnish Co.
Toledo. O.

DO YOU WANT

STOVES AND HEATERS

that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

The Gobeille Pattern Co.
CLEVELAND, OHIO.

PATTERNS

UP TO DATE

Wood and Metal for Stoves, Ranges and Furnaces to Order.

W. L. MERSFELDER,
400 East Pearl, CINCINNATI, O.

THE GEO. W. COPE STOVE PATTERN WORKS.
Randolph and Atwater Sts.
DETROIT, MICH.

The Miller Catalogue Cabinet Co.
ROY MILLER, Pres. H. KELLY, Sec.
SYSTEMATIC FILING DEVICES
For Catalogues, Price Lists, Etc.
Box 49, ALMA CENTER, WIS. 39-41 Cortlandt St. NEW YORK.
SEND FOR CIRCULARS.

JOS. J. SUCHANEK, ST. OLAF, IA., WRITES: "I would not be without The American Artisan at any price."

ALL HAIL THE SPRING.....

UTICA DROP FORGE & TOOL CO.
Manufacturers of Nippers and Plyers.

THE spring time means trim your hedges. Trim your hedges means pruning shears. Pruning shears means the GREEN BOOK of Hardware Specialties. They you are. Pruning Shears made from the best cutlery steel are illustrated in the GREEN BOOK of Hardware Specialties. Before buying consult yours.

Smith & Hemenway Co.

Manufacturers of Cutlery and Hardware Specialties.

Ask your dealer for these goods. 296 Broadway, New York City.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS Sold by All Hardware Dealers

NEW BRITAIN, CONN.

ENTERPRISE

Rapid Grinding and Pulverizing Mills

15 Sizes & Styles from $1.25 to $300.00

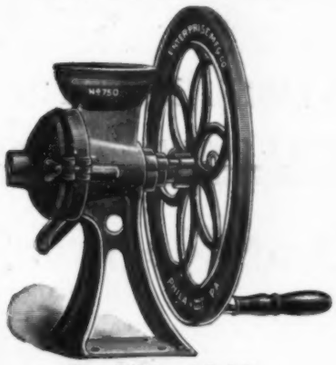
No. 1, $2.25

Send for Descriptive Catalogue

Meat Juice Extractor

No. 21, $2.50

Bone, Shell and Corn Mill



No. 750, $7.50

Order from your Jobber

The Enterprise Mfg. Co. of Pa., PHILADELPHIA, PA. U. S. A.

Lava Enameled Ware

is made from steel rolled especially for this purpose. It is covered with three coats of a very hard and elastic enamel, the surface of which is as smooth as the most delicate of china. The enamel is free from lead, antimony and arsenic.

Cleveland Stamping & Tool Co.

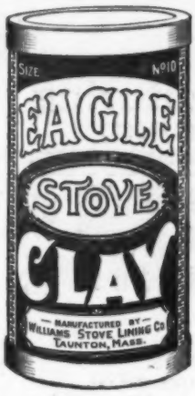
Cleveland, O.

CHAS. F. MALONE,
ROLFE, IA.,
WRITES:

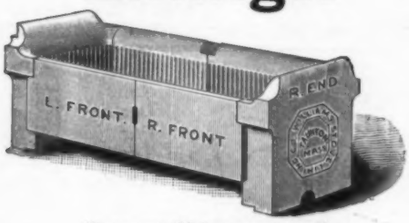
"If I went to South Africa I would want The American Artisan sent to me."

Incandescent Gas Fuel.

Prices and Samples Free by Mail.



Brick Stove Linings.



Prompt Shipment and Best Quality Guaranteed.

Williams Stove Lining Co., Taunton, Mass.

OLD DOMINION

Horse, Mule Shoes.

All the popular styles and weights.

Illustrated catalogue and prices on application

Old Dominion Iron and Nail Works,

ARTHUR B. CLARKE, Prest. **Richmond. Va.. U. S. A.**

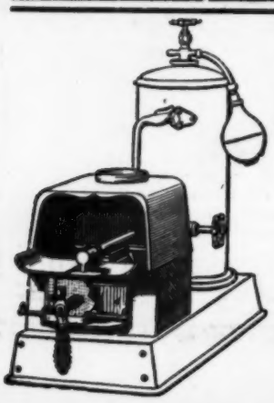
No. 230.

Draft Register Screw and Plate

COMPLETE

MANUFACTURED BY

The Fanner Manufacturing Co.
CLEVELAND, OHIO.



Ask Your Dealer For The

GEM SOLDERING FURNACE

AND YOU WILL MAKE NO MISTAKE

Always Ready.
No Smoke.
No Odor.
No Noise.
Unexcelled.
Unequaled.
Unrivaled.
Safe, Sure.
Durable.

Made Only By

Thirty Years Experience.

Burgess Soldering Furnace Co.,
COLUMBUS, OHIO, U. S. A.

BOLT AND SCREW CASES

ALL CASES GUARANTEED.
For Sale by all the Leading Jobbers in Hardware.
Send for Catalogue and Price List.

The American Bolt & Screw Case Co.
DAYTON, OHIO, U. S. A.

THE PHILADELPHIA LAWN MOWER CO.

3107, 3109 Chestnut Street,
PHILADELPHIA, PA.
U. S. A.

Send for Illustrated Catalogue.

The Mower

That will Kill all the Weeds in your Lawns. If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders

of roots, the grass will become thick and weeds will disappear. The Clipper will do it.
Send for catalogue and prices.

Clipper Lawn Mower Co.
(INCORPORATED.) Norristown, Pa.

Standard Self-Melting, Self-Sealing Wax Strings

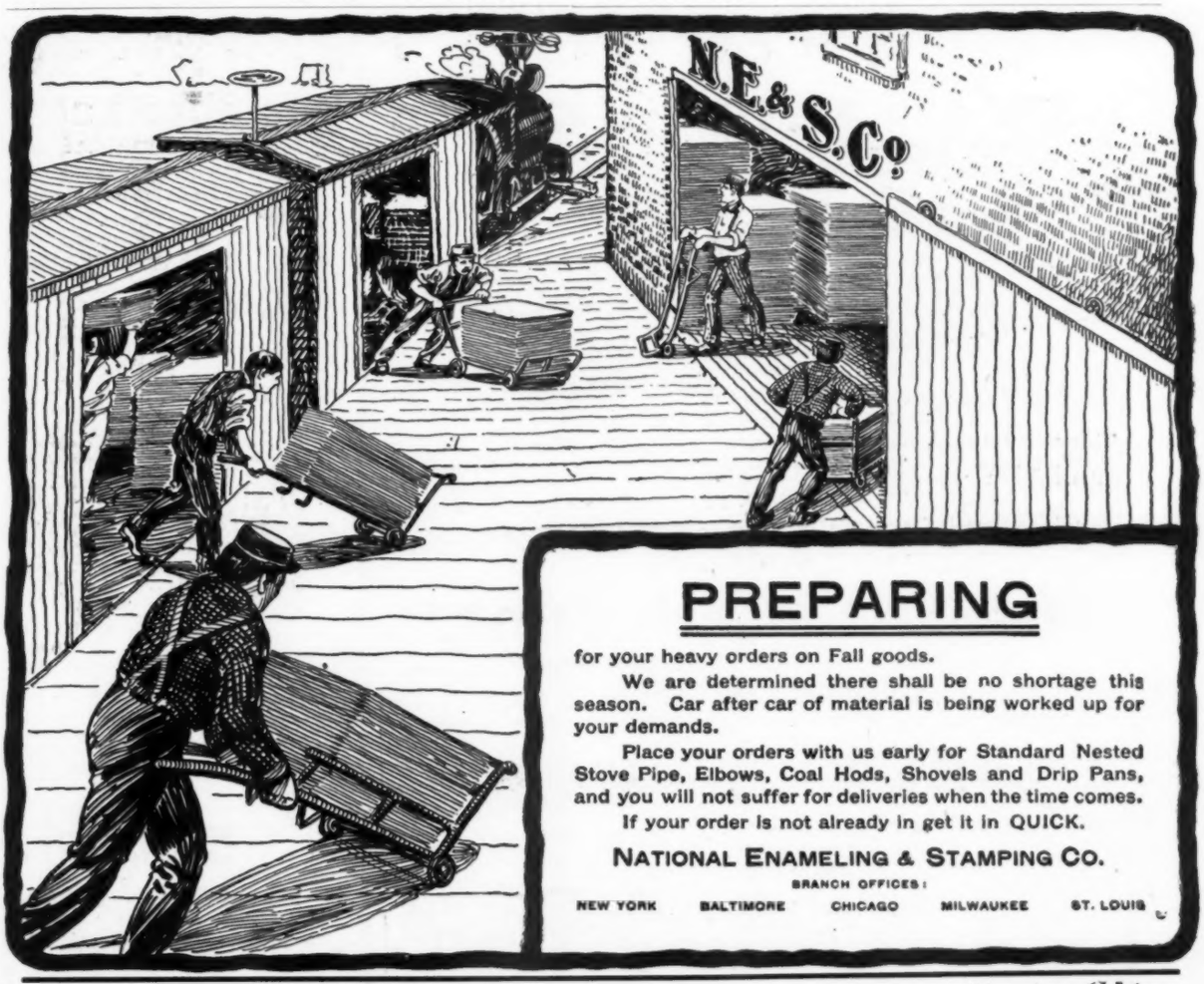
Is the very best Sealing Wax made for all kinds of fruit cans.

Very adhesive and economical.

For price to the trade, address the sole manufacturers' agent,

C. C. FOUTS
MIDDLETOWN, OHIO.

Crying to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.



PREPARING

for your heavy orders on Fall goods.

We are determined there shall be no shortage this season. Car after car of material is being worked up for your demands.

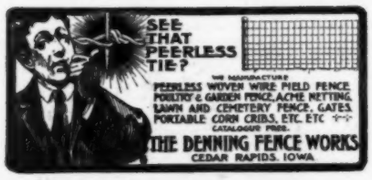
Place your orders with us early for Standard Nested Stove Pipe, Elbows, Coal Hods, Shovels and Drip Pans, and you will not suffer for deliveries when the time comes.

If your order is not already in get it in QUICK.

NATIONAL ENAMELING & STAMPING CO.

BRANCH OFFICES:

NEW YORK BALTIMORE CHICAGO MILWAUKEE ST. LOUIS



Iwans'

Patent Improved

POST HOLE AND WELL AUGER

For Post Holes and Wells.
For Electrical and Telegraph Purposes.

Received Highest Award World's Columbian Exposition 1893 for convenience and effectiveness in operation, excellence of material and construction.

There are other augers on the market, claimed to be as good as the "Iwan" Auger. THEY ARE NOT; BEWARE OF THEM. The "Iwan" is the standard of excellence.

It is the only auger that has met with universal satisfaction under all conditions of soil. It is unexcelled for easy and quick work. No suction when removed from hole.

It should be in the hands of every dealer, or any one who needs a good post hole auger

RECEIVED HIGHEST AWARD AT WORLD'S COLUMBIAN EXPOSITION.

IMPORTANT—Every Auger bears our stamp and label.

We manufacture also Post Hole Diggers, Drain Cleaners, Chimney Tops, Conductor Pipe Hangers, Hay Knives, etc. Sold by the jobbing trade.

Write for prices and illustrated circular.

Manufactured exclusively by

IWAN BROS., STREATOR, ILL

HOT SPRINGS ARKANSAS

BEST REACHED FROM ALL POINTS VIA THE

Iron Mountain Route

Write for Descriptive and Illustrated Pamphlets.

H. C. TOWNSEND,
General Passenger and Ticket Agent,
ST. LOUIS.

Twin City Fence and Wire Works

Manufacturers of all kinds of Ornamental and Architectural Iron and Wire Work, Office Railings, Window Guards, etc.

Office and Salesroom: 220 East Sixth Street, ST. PAUL. MINN.

An index at your fingers' ends

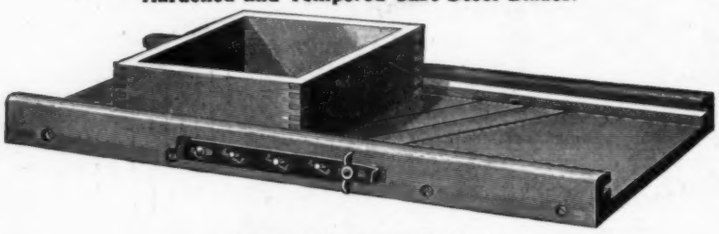
No handling "dead" matter, nor searching over pages of crossed-off items, as with book records. No re-writing, no transfering. The Y and E Card System is a living record; new cards are put in exactly their proper place—old cards ("dead" matter) are taken out. By having plenty of guides the exact card you want can be gotten almost instantly. No matter what, nor how many, records you keep, the Card System will keep them better and quicker. Send for Cat. No. 27—

Yawman & Erbe Mfg. Co., Rochester, N. Y.

New York Chicago Boston St. Louis
Philadelphia Pittsburg Toronto
San Francisco Cleveland
Baltimore

DISSTON'S
Slaw and Crout Cutters

Made From Well Seasoned Cherry Lumber
Hardened and Tempered Cast Steel Blades.



Adjustable Crout Cutter.

This cutter is very simple in construction and can be adjusted to any cut by loosening thumb screws on sides, moving slides backward or forward as required.

WE MANUFACTURE A FULL LINE OF

Slaw and Crout Cutters, Potato Shredder, Corn Grater, etc.

Henry Disston & Sons, Inc.

KEYSTONE SAW, STEEL AND FILE WORKS,
PHILADELPHIA, PENNA.

"Yankee"
Screw Drivers

No. 12—RATCHET, WITH STUB BLADE

No. 11—RATCHET, RIGHT AND LEFT HAND AND RIGID

No. 15—RATCHET, WITH FINGER TURN ON BLADE

No. 30—SPIRAL RATCHET, RIGHT AND LEFT HAND AND RIGID

HAVE NO EQUALS.

THEY ARE SOLD BY LEADING JOBBERS.

Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

Lyons Specialty Co.

LYONS, IOWA,

We are **NOW** the manufacturers and jobbers of the **EVERLASTING CHIMNEY CAP.**

Design Pat. Feb. 1, '98.

Made of Cast Iron and fits any Chimney. Sets on top, and is held in place by cement. Collar at top of cap for round pipe when necessary to extend the chimney.

No chimney is complete without one.

We can now make prompt shipments, and solicit orders from the jobbing and retail hardware trade.

Lyons Specialty Co.

LYONS, IOWA.

Faith in Advertising.

WITHOUT newspaper announcements no man who has commodities to sell or services to render can achieve as high a degree of success in business as he could with judicious advertising; and the success which newspaper publicity brings is worth many times its cost. A leading merchant of Syracuse (New York) says: "Most of the owners of large mercantile establishments who use newspaper space had their start under the same conditions that nine-tenths of the small mercnants work under. They have had faith in advertising and the courage to buy space."

Reversible Cast Iron Shoe Lasts and Stands

Made in 7 sizes and ready sellers.

Round Griddle

With Bail Plain or Ground.

We have the largest and best equipped factory in the South for the manufacture of Sad Irons, Country and Stove Hollowware, Ground and Unground; Sugar Kettles, English Pots, Cast Iron Shoe Lasts and Stands, Kitchen and Corner Sinks, Grates, &c.

Blacklock Foundry,

South Pittsburg, Tenn.

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O.
MANUFACTURERS

Steam Heat and Open Fires.

French Lick Springs

In the Indiana Highlands on the

Monon Route

Hotels Open all the Year Round.

Two Trains Daily from Chicago.

Through Sleeper from Dearborn Station, 9 p. m.

Send for booklet.

City Ticket Office, 232 Clark St.
FRANK J. REED, G. P. A., Chicago.

Photographic Reproduction—Entire Equipment Made by Our Company, in Eight-Feet Sections.
Retail Room, 225 ft. Deep, 55 Ft. Wide 9 ft. Ceiling.

WARREN'S TIME-SAVING SHELVING—Make Your Goods Sell Themselves with Shelving that Doubles Your Popularity, Value of Clerks and Capital.

J. Q. Warren Mfg. Co.

COMBINATIONS TO SUIT ANY STORE, PERSON OR PURSE

Expert Designers of Hardware Shelving and Correct Arrangement of Stock

Manufacturers

Warren's Patent Glass Front Drawer Hardware Sectional Shelving

Catalogue Cabinets...Bolt and Screw Cases and Other Hardware Fixtures

MASONIC TEMPLE—Fifth Floor Offices and Display Rooms

CHICAGO, U. S. A.

TIN CHURNS.

Better than the old-fashioned wooden ones—no hoops to drop off or seams to open in the sun.

No danger of smashing or cracking them as there is when using a stone or earthernware churn.

They are lighter and more easily kept clean. Milk cannot soak into the tin, causing the Churn to become sour or rancid.

Made of IX Tin. Complete with Dasher.

Gallons: 3 3½ 4 5

WRITE FOR PRICES.

A. GEISEL MANUFACTURING CO., ST. LOUIS, U. S. A.

THE ARRAS CREAM SEPARATOR.

Separates cream from milk thoroughly without dilution and no machinery. The most convenient device for handling milk, winter and summer, on the market.

A Sure Seller, sold only to one dealer in each town.

Write for prices and descriptive catalogue to

The Arras Cream Separator Co.

Pat. May 21, 1901. BLUFFTON, OHIO.

Two in One

A Combination Cream Separator and Churn.

Good Butter Always Has a Market.

Exclusive territory to one good dealer in each town.

Full Line of

Dairy Supplies

Catalog Free.

Detroit Churn & Separator Co.

14 and 15 Bennett Bldg., Detroit, Mich.

THE SURPRISE CREAM SEPARATOR.

Pat. Applied For.

The milk is not mixed with the water. Skimmed milk not diluted with water is worth money to the farmer.

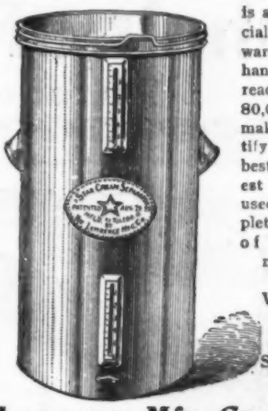
Write for prices and secure agency.

Every Separator Guaranteed.

Made of best heavy tinplate and is durable.

SEITHER & CHERRY CO., KEOKUK, IOWA.

Star Cream Separator



is a paying specialty for hardware dealers to handle. It is already in use by 80,000 butter makers, who testify that it is the best and cheapest device ever used for the complete separation of cream from milk

Write for Catalogue

Satisfaction Guaranteed.

Lawrence Mfg. Co. TOLEDO OHIO

Please address Dept. C.

The Jersey Cream Separator

takes less than an hour to separate cream from milk. It is beyond a doubt the most simple, practical and reliable separator made. It is sold only to the trade. Prices will be furnished on application.

The Galesburg Cornice Wks.,

GALESBURG, ILL.

C. M. DOXSEE,

ALCONA, IA., Writes:

"Please drop my ad. for a tinner, I have secured the services of a good man, and have not time to answer all the applications."

THE WONDERFUL "DORAN LIGHT"

Don't Be Handicapped By Big Light Bills!

Let a "Doran" Light System solve the light question for you. It guarantees, lamp for lamp, a light more brilliant, more steady, more penetrating than the electric arc at just about one-tenth the cost.

1,200 Candle power. White, soft, diffusive light and absolutely safe. Air pressure gasoline tank situated outside the building; connection with the lamps made by seamless wire tubing. As many lamps in a system as desired. Light can be turned up or down at will.

"Doran" Lights are inexpensive to install and cost little to maintain. Efficient, economical, satisfactory. Let us send you catalog.

Acorn Brass Works,

Dept. H, 15-23 So. Jefferson St., CHICAGO, ILL.

WE WANT AGENTS for "Doran" Lights, also for the "M. & M." Portable Arc Lamps (600 Candle Power). Exclusive territory allowed.

The Century Rural Mail Box

OF DETROIT.

For Rural Free Delivery.

Approved by Post Office Department.

Nearly a million boxes have already been sold to farmers. Fifteen to twenty thousand are now being sold every week.

Get Some of this Business.

It should be handled through the hardware dealer. Write us for instructions for getting a **Sample Free.**

Briscoe Manufacturing Co.

DETROIT, MICH.

N. B.—We also make the famous "Hecla" copperoid oil can.

Standard Chain Company.

Chain of all Kinds.

Pittsburgh, Pa.

Fox Brand Razors

are known as the best.

WE MAKE ALL WIDTHS AND STYLES. THE FOX TRADE MARK IS REGISTERED. SEND FOR CATALOGUE.

Fox Cutlery Co.,

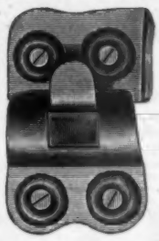
928 MAIN ST., DUBUQUE, IA.

48 Center St., New York, N. Y., Canandaigua, N. Y.

M. O. Miller, Cambria, Wis., writes: "Please discontinue my adv. in the want column of The American Artisan or I shall have to engage a stenographer."

DEALERS and Agents make money selling **RIPPLEY'S** Orchard, Field, Wheelbarrow, 4 and 5 Gallon Compressed Air **SPRAYERS** and spraying mixtures. Catalogue free.

Rippley Hdw. Co., Sprayer Mfrs. Box 58, Grafton, Ill.



FINALLY FOUND, something that will interest everyone.

GOSSETT'S Detachable Suspension Hinge, for hanging screens and storm windows. Provided with a guide flange, makes it easy to attach or detach window from inside the house. No ladders. No screws. No buttons.

WRITE FOR CIRCULARS AND PRICES

F. D. KEES., Manfr, BEATRICE, NEB.

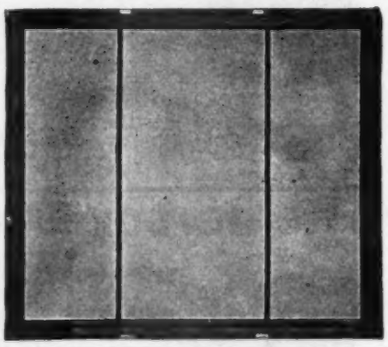
THIS LOCK can neither be forced with a jimmy nor opened from the outside. It is as secure when set for ventilation as when closed, and in no instance has it failed to successfully resist the attack of Burglars, Porch climbers, and sneak thieves; can be put on without cutting frame or sash at moderate cost and is fully endorsed by all people who are protected by it. Send for booklet of photographed testimonials.

Send for catalogue.

Harlev Burglar Proof Ventilating Sash Lock Co.

92 La Salle St., CHICAGO.

If you wish to know why the sales of the "Flyer Window Screen" increased 6,000 dozen last season, write



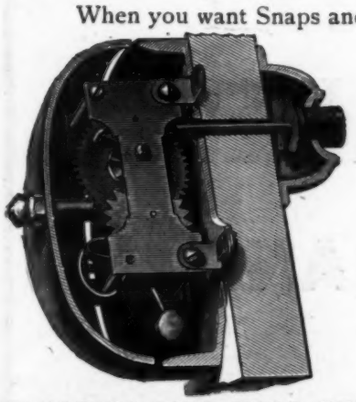
The A. J. Phillips Co.

FENTON, MICH.

"Nothing except the mint can make money without advertising."—Gladstone.

Job Stocks of Hardware

When you want Snaps and Leaders consult us. We are headquarters for Jobs in all lines.



A COMBINATION MONKEY WRENCH.

We bought 5,000 of them at manufacturers' sale. They are malleable iron. Length, closed, 9 inches. This cut speaks for itself, and shows the various different purposes to which this wrench can be put—monkey wrench, hexagon end, round in the center, and hammer head. It is made of 3 pieces, and is a thoroughly practical and indispensable tool.

Per Dozen, 75 cents.

ELECTRIC RING DOOR BELLS.

We offer you the best electric ring door bell ever made. It requires no battery. Self winding—rings as you push the button. It has the same powerful sound as an electric bell, and is at once the most perfect, novel and simple door bell on the market. It is 4 inches in diameter. The gong is full nickel plated, with plain bronze rosette.

Per Dozen, $5.50.

THE "NEW IDEA" PADLOCK.

Made in malleable and gray iron, finished in bronze enamels.

Equal in point of strength and general utility to the most high priced padlocks.

Owing to the peculiar shape of the key and key-hole channel, the "New Idea" Padlock is practically proof against being operated without its corresponding number key. Size of "New Idea" Padlock, 2¼ inches in diameter, ⅝ inches thick. Twelve combinations to the dozen. Attractively put up in ½ dozen boxes, 1 and 2 gross cases. Its worth is positive and instantly recognized at a glance. It is of wonderful strength, the key enters the lock in a circle, rendering "picking" impossible; is of small size and attractive appearance.

Per Dozen, 65 cents.

Write for our Confidential Hardware Catalogue No. 70.

Chicago House Wrecking Co.

West 35th and Iron Sts., CHICAGO.

The Dime Screen Door Check.

(PATENT PENDING.)

MANUFACTURED BY

CALDWELL MFG. CO., Rochester, N.Y., U.S.A.

The Most Effective Device Ever Made to Prevent the Great Annoyance of Slamming Screen Doors.

Fig. No. 1.

Fig. No. 1 illustrates the closing door bringing the plunger on the door in contact with the top of the rubber bumper, throwing it up to position as in Fig. No. 2. The door rebounds from the concussion and the rubber drops by gravity to position as shown in Fig. No. 3, allowing the door to close

Fig. No. 2.

PACKED IN ATTRACTIVE DISPLAY BOXES TO RETAIL FOR

10 CENTS.

Fig. No. 3

THE DEMAND IS LARGE.
THE SEASON SHORT. . . .

Get Your Orders in Early.

1902 CATALOG AND NET PRICE LIST
SENT ON POSTAL REQUEST.

THE AMERICAN WRINGER CO.

HORSE-SHOE BRAND

CLOTHES WRINGERS

99 CHAMBERS STREET,
NEW YORK.

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MADE WITH BALL-BEARINGS.

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.
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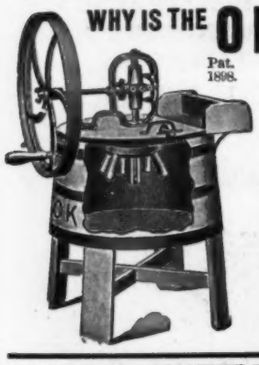

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BECAUSE

1.—It is the only Rotary Washer that has **Revolving Steel Ball Gearing,** reducing **the friction** and thus making machine so **light running** and almost **noiseless.**
2.—The tub is made of **Louisiana Red Cypress Lumber,** cherry finish; the legs are **solid with tub,** (not removable, breakable legs fastened with screws).
3.—The wheel turns right or left, pin wheel or dasher reverses automatically, turning the clothes back and forth through the hot soap-suds, and cleaning them without **rubbing** them to pieces.
4.—This washer is made by **experienced mechanics,** and will outlast any other washer on the market.
5.—The tub has a wringer box fastened with steel brackets.
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Unequaled in Efficiency, Capacity AND Perfect Working Qualities.

Made of Select Quality Cypress Wood.

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It Can Be Operated By Either Hand or Power.

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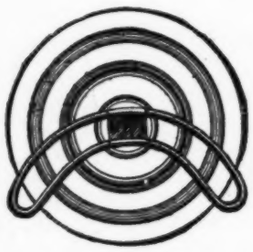

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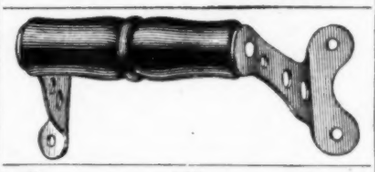
The Highest in Quality		Write * for * Price
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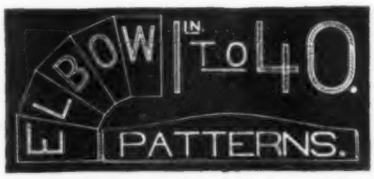

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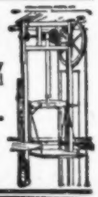

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